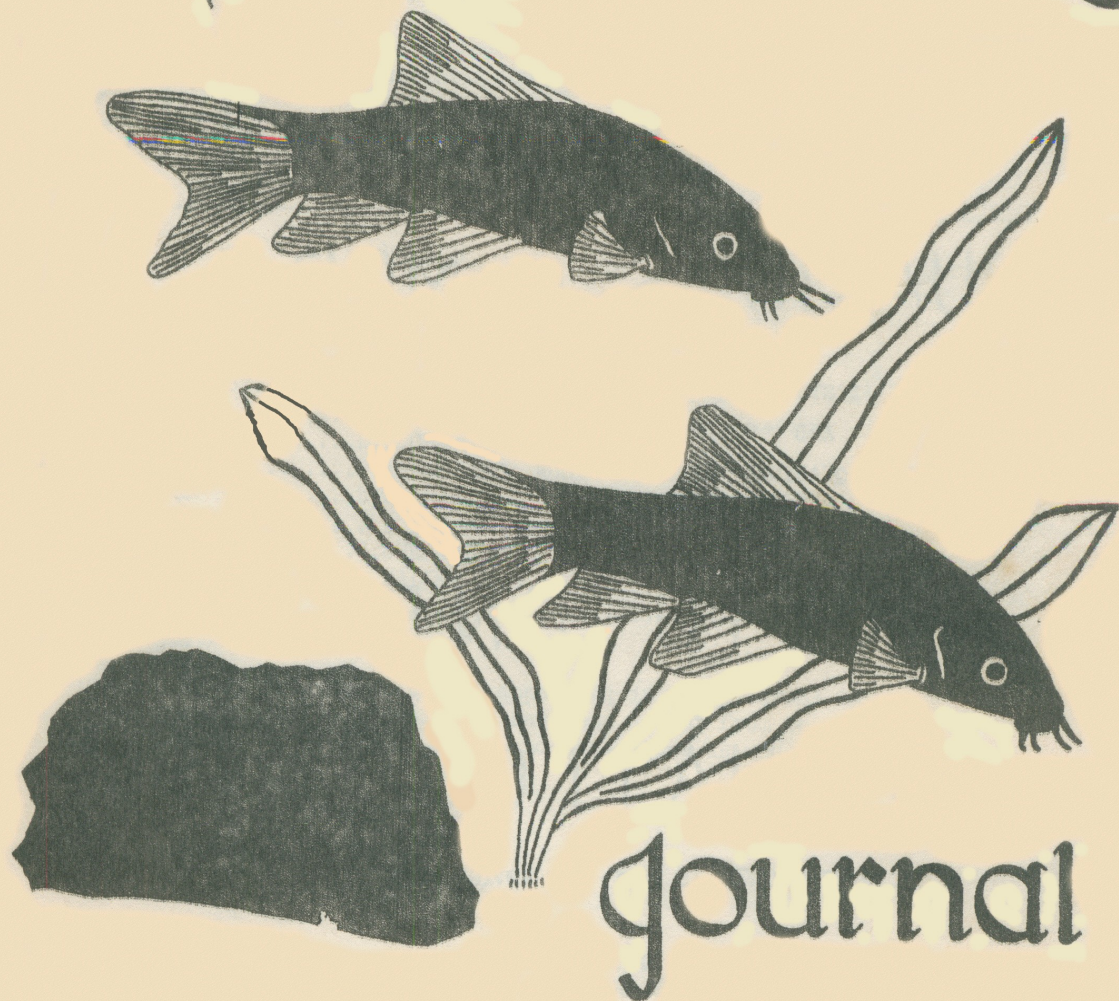


Southend, Leigh, and District Aquarist Society



SOUTHEND .LEIGH AND; DISTRICT AQUARIST SOCIETY
(Founded 1935 or before)
Affiliated F.B.A.S. & A.E.E.L.A.S.

Meetings are held on the 1st and 3rd Tuesday of every monthj the meeting commences at 8.30pm.

VENUE;

**ST ANDREWS HALL,
ELECTRIC AVENUE,
WESTCLIFF-ON- SEA,
ESSEX.
(Entrance in South View Drive)**

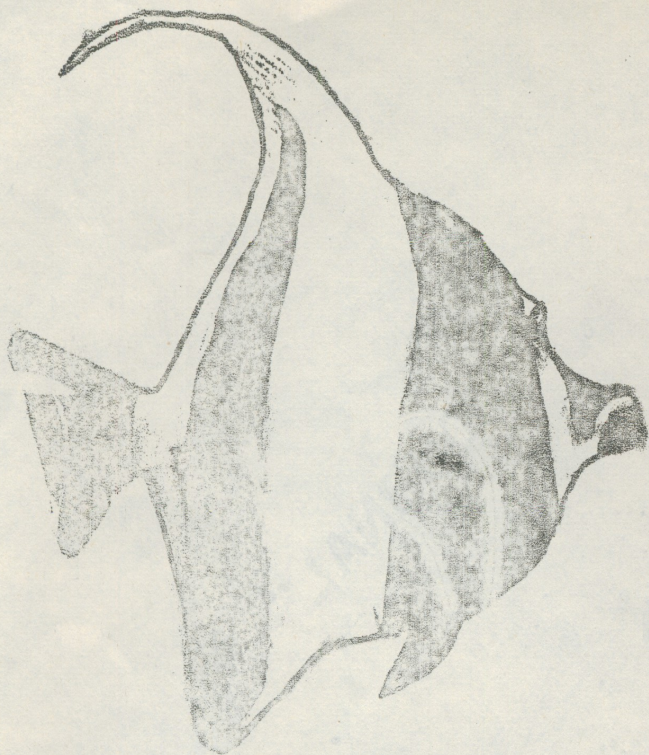
BI-MONTHLY JOURNAL

**No. 92
JAN/FEB 1983.**

CONTENTS

OFFICERS FOR 1983	:Page 2
EDIRORIAL	3
THOSE WERE THE DAYS?	5.
DID YOU KNOW?	5
1983- OPEN SHOWS D.M.CHESWRIGHT	6
PUZZLE CORNER P.MANSFIELD	6
BREEDING BETTER BETTAS D.DURRANT.	7
TABLE SHOW AWARDS 1982. ;	9
AMERICAN PUBLIC AQUARIUMS . . C . CHES WRIGHT	10
HUMBLE BEGINNINGS A. WALLER	11
A FIRST IMPRESSION J.RAY -	12

COPYRIGHT,. Any original material appearing in this journal may be reprinted provided permission has been sought from the editor and full mention of S,L.A.D.A.S. and the author is made.



MARINE
AND
TROPICAL
FISH

AQUARIUMS + MORE

SPECIALISTS IN MARINE - TROPICAL
AND COLDWATER
FISH AQUARIUMS MADE TO YOUR OWN
SPECIFICATION

STUDIO ONE
AQUATICS



OUR EXPERIENCE IS VAST, OUR ADVICE FREE

23 RECTORY GROVE,
LITCH-ON-SEA

SOUTHERN 714632

OFFICERS FOR 1983

PRESIDENT

DAVE BURGESS. 11 ,SILVERDALE AVENUE,WESTCLIFF-ON-SEA,ESSEX.
TELEPHONE: SOUTHEND-ON-SEA 337196.

VICE PRESIDENT

TONY COOPER. 98,ANSON CHASE, SHOEBURYNESSE, ESSEX
TELEPHONE SHOEBURY 54090

SECRETARY

DAVE CHESWRIGHT, 2, CEDAR AVENUE, WICKFORD, ESSEX
TELEPHONE : WICKFORD 2531.

TREASURER

DAVE BARON. 17,BELGRAVE CLOSE EASTWOOD, ESSEX.
TELEPHONE: SOUTHEND 527307.

EDITOR

CHRIS CHESWRIGHT. 2, CEDAR AVENUE, WICKFORD, ESSEX
TELEPHONE WICKFORD 2531.

ASSISTANT EDITOR

KEVIN BROWSE. 6, SEVEN ACRES, WICKFORD, ESSEX
WICKFORD 67640.

TABLE SHOW SECRETARY

ANDREW WALLER. 32,HAMILTON ROAD, HEATH PARK, ROMFORD, ESSEX.
TELEPHONE: HORNCHURCH 59982.

LIBRARIAN

FRED RAY. 20, WINDMILL STEPS , KURSAAL WAY,SOUTHEND--ON-SEA, ESSEX,
TELEPHONE: SOUTHEND 615137.

PUBLIC RELATIONS OFFICER

KELVIN HOLT. 18,STEBBINGS,LANGDON HILLS ,ESSEX.

CATERING SECRETARY

AUDREY CHESWRIGHT . 2,CEDARAVENUE,WICKFORD, ESSEX
TELEPHONE. : WICKFORD 2531.

SOCIAL SECRETARY

GILL RAY, 20, WINDMILL STEPS , KURSAAL WAY,SOUTHEND-ON-SEA,ESSEX.
Telephone. SOUTHEND 6t5137

COMMITTEE MEMBER

TERRY WALLER. 32,HAMILTON ROAD, HEATH PARK.,ROMFORD,ESSEX.
TELEPHONE: HORNCHURCH 59982.

EDITORIAL

So begins another new year in-S.L.A.D.A.S. :with a new Editor.I would like,as is customary,to thank Jackie Harrison for her work as Editor over the past year and to Paul Mansfield for putting up with the duplicator. That's the thanks over with now down to business.This club magazine is bi-monthly and you may think that this is plenty of time to put it together,but you'd be surprised at the time it takes to get the articles, type the stencils (my typing speed of about 1 word a minute doesn't help!)and print it,this job was pushed upon Kevin Browse.So we are running to a very tight deadline.

Now the part you've all been waiting for? Yes its that age old plea from me to you for those badly wanted articles.I have some ready for the next journal but I desperately need some articles about FISH -anything. Some notes about your favorite ones, how you bred a species-.or some general hints on how to keep them. I don't mind if you are not very good at putting an. article together give me the facts and I'll do it for you.

The next magazine will be at the Open Show so let it be a bumper issue. There is,once again an incentive to put pen to paper a fabulous prize of £5 is waiting for the best article to appear in the Journal during 1983.This prize was awarded to Paul Mansfield in 1982 for an article he wrote on 'Breeding Orange Chromides.' Paul also won the club £25 for his letter writing in the Aquarist magazine-well done.

1983 has started O.K.-weather wise and this mild weather should be . keeping down those heating costs which is a good thing in these days of increasing fuel costs! Lets hope it keeps on this way for the rest of 1983.

It may be noticed on page 7 there is for the first time in the S.L.A.D.A S journal a real picture (No expense spared this year.),it is hoped that we may be able to produce more photos later in the year,but we'll have to wait and see.

Of all the pages in this magazine I am supposed to have my editorial freedom to write something, but every time I sit down at the desk my mind,originally full-of bright ideas goes completely blank. I have ,as you have just read(I Hope)managed to get some ramblings down,be they a bit disjointed,- I would like to 'take the opportunity of apologise for any spelling mistakes.,grammatical errors and wonky lines (I managed to put a few stencils in the typewriter at a strange angle.I hope to have overcome these teething troubles for the next issue.

Chris. C heswright EDITOR

P.S. If you have any criticisms don't hesitate to let me know,nicely

PRESIDENTS PAGE.

Here we go again, President for another year.its nice to be in,the chair again and I hope to have.another year of enjoyment helping to. run our club. '!',,,

The A.G.M. passed very quietly again this year, all posts.filled and other members still ready to help,or stand in if so required. We have got a good committee this year,everyone is very enthusiastic. Some. with a long and varied interest in the hobby, others, with not so long in the hobby but with plenty of interest and willingness to help, the club,and at the same time gain more knowledge of the hobby.

We have had two committee meetings since being elected,.,both of these have gone well.A meeting was also held to discuss the club programme fer 1983/84,at which plenty of ideas were .raised. So you can all look forward to an interesting time and one or two differant things in. the future. We have also had an Open Show meeting and I can assure, you we are well on the way to another great Open Show.

I don't often single people out,but Dave Cheswright has definitely got things under control.There will be plenty to do for the rest of us, so .don't go getting the idea of leaving it. all to us.Your help will be needed one way: or another, even if you only start getting your fish entries together it will be a help.It would be nice to see our club members coming on the stage to collect prizes from the Mayor.

I could put a lot in the journal about things discussed in. committee meetings,but most of them are reported at.'the meetings to you.One thing to remember is a £5 prize for the best Journal article from.you this year.It might win you £5,it will definately help fill and make the Journal more interesting,so get your pens out. I have to!!.

Here`s hoping you get plenty of enjoyment out of the: meetings and . appreciate the work put in by the committee.Don't forget anything you would like the club to do will always be considered,just. tell..one of the committee members.Here`s wishing you all successful fish keeping, good luck.

Dave Burges (President)

The BUBBLE BOWL, advertised in this journal has .recently moved from this address to new larger .premises 193,HIGH ROAD,SOUTH BENFLEET. Sorry for any inconvenience caused to members, trying to find this shop and to the Bubble Bowl.

March Meetings; Mar. 1 talk on Foods
Table show Challenge(l)
Mar. 15 An. F.B.A.S.tape slide lecture will be given.
Tableshow- Db Dwarf cichlids Da A.O.S. Cichlids

Those were the days?

On obtaining some old water life magazines, I was interested to see some of the prices being charged for fish. The examples given below are for December 1950.

Neons.,.....12/6 -	Dwarf gouramis..... 17/- pair
Glowlights..... 10/-	Tiger barbs..... 7/6
Harlequins- .12/6	Cherry barbs..... 7/6
Penguins-.. 10/-:	White clouds..... 4/3
Hatchets...25/-	Angels.....From 3/-
Zebras..... 1/6	Red Platies..... 3/3
Swordtails.2/6	
Guppies..... 1/6 per pair.	
Fighters..... 5/6	

As you can no doubt see the prices are shown in pounds, shillings and pence. For those of you who are too young to remember this, or like to think they are. Here is the present rate of exchange with decimals; 1/- = 5p. Now add on 33 years of inflation and you have some idea of what those prices are today. They are quite amazing (Neons at over .£10 each!!!) and well above the prices paid today. Why, then, are the prices so much cheaper today? There are a variety of causes of this, the main reason being the present mass production of fishes in the Far East (Singapore and Hong Kong, for example) for export. In 1950 the majority of fishes would have been wild or home bred, thus I would expect the fish quality to have been superb. Other reasons for the high prices include the ease with which shipments (By plane?) can be moved around the world now as compared with 30 years ago and also the improvement of transportation techniques. These being namely the use of the plastic bag, as compared with large, cumbersome and heavy glass containers. The polystyrene box being the other great invention preventing the loss of heat from the fish.

Thus all those facts considered, the mass production of fish, faster means of transport and improved methods of packing fish it is no wonder prices have dropped. In 1950 the fish was caught in an out of the way area (e.g. Amazonia) transported by foot or boat to a port and then shipped out to England with enormous losses on the way, so to cover costs prices were high. Some fishes are still collected in this way and these represent the fish seen in small numbers and at high prices - in dealers tanks. Incidentally all marine fish are wild caught, so the price today is 'cheap' but what about the quality?

Did you know?

S.L.A.D.A.S. USED TO HOLD IT'S OPEN SHOW AT THE END OF THE PIER

In 1952 a Mr Chubb of Plymouth A.S. was entering coldwater at Open Shows!

Sybil Hedges, a friend of Terry Wallers, used to take a Snakehead (Called Caesure) to open shows, it was 4' 6" long and had a girth of 11" !!!

A club secretary in the Midlands some years ago was a Mr Worm.

If you have seen, or heard any odd snippets about fish or fishy people I would be glad to receive them. Thanks to Terry Waller for the above.

1983 - OPEN SHOWS

D.Cheswright.

Our .OPEN SHOW is on Saturday, 14th May Y at St. Clements HALL, Rectory Grove Leigh-On~Sea. We have the hall :on the evening of the 13th MAY to. put up the staging, etc. All our equipment has to be moved from St Andrews .to St Clements and we need all the help we can get from members on both dates. Please let me know if and when you are available. Help will also. be. needed by Audrey on the day of the show with refreshments and cooking, the Judge's Dinner. There will be the usual draw and tombola. A raffle will also, be held ,draw tickets will be for sale prior to the show. Our society stand will also be on display-all these will need plenty of helpers. ,

We have 12 F.B.A.S. Judges booked this year instead of 9 and. .hope this will mean that judging will finish more near to time.

The British liillifish Association(Essex) will be there with a display and probably the F.B.A.S. and a Livebearer stand.

In 1982 our show was probably the biggest and one of the best in the U.K..One of the ways you, as members can make it so again is to support other . Societies Open Shows-as well as our own, Dates are below, there are only two before ours.

March 6th Haringey, London.

April 17th Croydon, Surrey

May 22nd Brighton, Sussex See Jill Ray if you are interested in a coach trip.

June 5th Sudbury (Near Wembley)

& Mid Sussex

June 18th East Dulwich

June 26th Strood, Kent

July 3rd S.E. London

Sept` 18th Tonbridge, Kent

On March 19th the F.B.A.S. is holding a. Convention at the institute of Education ,London University and it is expected that- Herr, Gunther Sterba from East Germany will lecture. This is planned to coincide with the English edition of his revised book being published. The cost of tickets will be about £5.50. Members wanting tickets please let me know.

PUZZLE CORNER

P.Mansfield

Solve the clues, and the first letter of each answer will give another fish. ; . ;

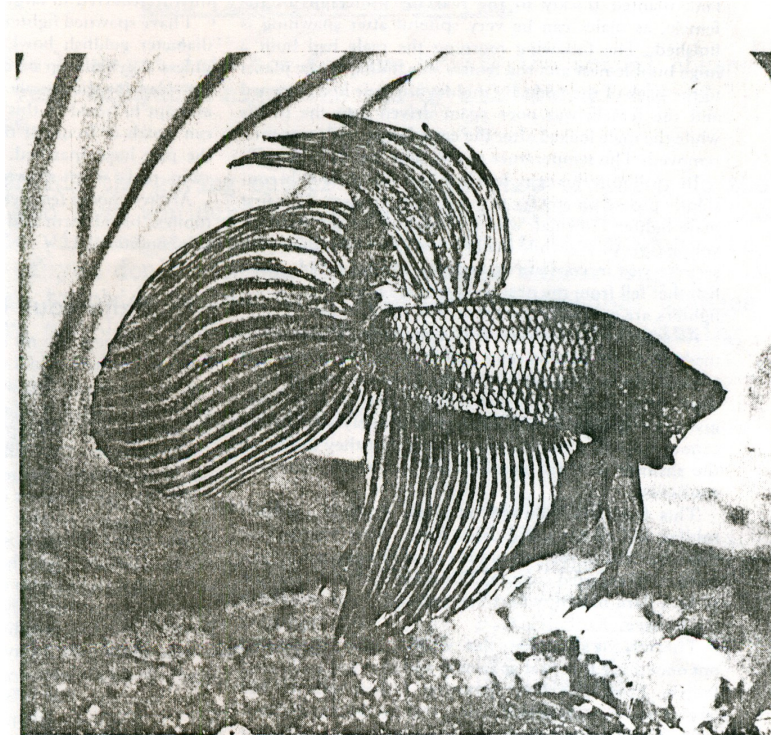
- 1) Could he put William Tell to shame? (6,4)
- 2) « good food for fry (7)
- 3.) A popular livebearer (5,9) .
- 4) A black, blue and yellow characin (7,5)
- 5) A marine with a mane (8)
- 6) *Cichlasoma meeki* (8)
- 7) Microscopic organisms (9)
- 8) Something to ride across the waves? (3,5)
- 9) A popular rasbora (9)

Answers on Page 11

Breeding Better Bettas

A breeder's account of personal experience with these popular fish and the history of the development of his strain that proved highly successful on the show benches

By D. DURRANT



THE following article, I must stress, deals with my own experiences in breeding the Siamese fighter. I would point out straight away that I have never delved into hardness of water or pH factors.

My first experience of fighters was watching the magnificent sight of a pair spawning in a friend's house. I recall my friend telling me to keep well away from the tank, not to startle the spawning fish. I also recall his remarks on how stupid the male fish was in allowing the female to eat half of the eggs! After watching this pair of fish spawn for several minutes I decided there and then that this was the fish I most wanted to breed.

That was about 7 years ago. Having attended a few open shows in the home counties I was aware that good line-bred fighters were in short supply. I was faced with the problem of having to produce a good line of fish from the stock that was available on the market at that time.

I decided that good finnage was the first essential in a fighter, so I purchased the largest fighter of most attractive finnage that I could find in any shop. This fish was a Cambodia male, having a beautifully clear cream body with red fins. Wanting to breed with this fish as soon as I had purchased it, and not being able to buy a Cambodia female at this time, I bought a blue female that was in.....

spawning condition (this female was not all blue as there were streaks of red in the finnage).

These fish were placed in an 18 in. by 12 in. by 12 in. tank planted thickly to the rear for protection of the female, as males can be very spiteful after spawning is finished. The following morning the male had built a huge bubble nest and the female was hiding in the plants to the back of the tank. By midday the pair had spawned and the female was once again driven into the plants while the male looked after the eggs. The female was then removed. The temperature at this time was 80°F (27°C).

In 36 hours the eggs hatched and the male fish constantly picked up any fry that fell from the nest. This first male fighter I owned was a wonderful father with his young fry. All the while the fry were absorbing their yolk sacs he was in constant attendance to replace any baby fish that fell from the nest. I have since learnt that not all fighters are as good a parent as was my first fish!

As soon as the fry were free swimming Infusoria was made from old banana skins and dripped into the tank at a speed of one drop per 5 seconds. This was kept up for 2 days. After 2 days newly hatched brine shrimps were given. I must stress that I find that a 2 days-old fighter cannot swallow a whole brine shrimp, but they can break the shrimps in their mouths until the whole shrimp is consumed.

This food was followed by sifted daphnia, chopped tubifex and all the usual dried foods. After 3-4 months these fish had developed quite a good finnage and were a mixture of assorted colours. The main coloration seemed to be a dark brown, with blue, red and cream streaks in the finnage.

This was the start of my line of fish. I have only crossed out once since that first spawning and that was with a red female. From this first spawning I then selected the largest and best finnaged males, and bred them with the reddest and largest finnaged females. I kept breeding brother and sister, father and daughter, mother and son until, in early 1967, I had the finest red fighters I had ever seen anywhere (in my own opinion).

This was the time that I started showing fighters. I have since shown these fish all over the south of England and won many awards. One that I was very pleased to gain was a 'Best Fish in Show' award. This award made my fish eligible for the Champion of Champions contest at Manchester. I entered but did not gain an award, but in the fighter class I did gain the first and second awards, to my delight.

I have found that after 7 years of line breeding and only crossing out once in all that time my strain of fish has deteriorated terribly. Finnage is shorter and colour is fading. I have therefore started crossing out with another strain. These other fish are not line bred but have excellent finnage, so I hope to produce more good fighters in the not too distant future.

Observations on Fighter Breeding

Fighters in good condition will breed in almost any situation. They will breed as early as 6 weeks old, but when aged are very fond of eating their own eggs. Water conditions are not very important: I have used fresh tap water, aged aquarium water and rainwater and have found these all to be satisfactory. Fresh tap water seems to invigorate the fish and spawning usually takes place straight away after it is used.

plus brine shrimps. After 10 days or so ground tubifex can also be given and then sifted daphnia and so on to all the larger foods. Keep the temperature at around 80°F (27°C).

One question often asked is when do you part the males developed from one spawning. This seems to depend on the fish concerned. Some males will start fighting at 6-7 weeks of age. Others will not fight until 4-5 months old and others hardly scrap at all. I never part my males until I have to, and that is at the first sign of scrapping.

I have found that females also fight and when I have shown breeder's teams have had to separate the females as well as the males. These females will also display with

Tank set-ups are not very important either. I now use 6 in. by 5 in. by 12 in. tanks for the actual spawning and raising the fry to about 3 weeks old. The young fry are then transferred to larger tanks for growing on.

I have spawned fighters in a container as small as a 6 in. diameter goldfish bowl, but this I do not recommend unless a nylon mop or some other form of protection is provided for the female to hide behind, and only if you attempt to breed in this set up when you are home and can watch at frequent times. Remove the female once the pair have spawned. I always use two mops in my 12 in. tanks when spawning fighters.

Always choose females that are ripe with roe; daphnia, tubifex, bloodworm and Bemax soon get the females in this condition.

Behaviour of Male Fighters

In my experience no two male fighters ever act in the same way, whether in a community tank or when breeding. If you intend breeding fighters along any particular line always keep five or six males of the line you require or you may meet disappointments.

Firstly some males will eat the eggs after the spawning act is completed. Some males will even eat the eggs whilst the spawning act is being carried out. Other males will not bother to pick up the eggs and will watch the female devour them. It seems that some other males will not breed at all. Then there is another type of male, who, as soon as he is put with a female, closes up all his fins and hides in the corner. These males I feel lack something owing to the line breeding and will never alter.

One small trick I have learned for use with a fighter that continually eats eggs and that is otherwise such a good specimen that offspring are required from it. Set up a tank with an opaque divider in the centre. Be sure that the water level is such that the fish cannot jump over the divider (a fighter can jump some 3 or 4 inches clear of the water).

Place a pair of fighters in each half of the tank at a time when you know that you will be around to watch proceedings. All you then have to do is wait and hope that both pairs will spawn at roughly the same time. If you succeed this far then as soon as the fish that eats the eggs has finished spawning with the female, remove both fish. Remove the female from the other pair then take out the divider and carefully blow the nest over the surface to the nest of the other male. He will then carry on looking after the eggs as though they were from his own female.

Another method that can be used when the male eats the eggs after the spawning act is completed, is to remove the male and female as soon as the male drives the female away. Then, with a small plastic food box, scoop up the eggs into about 1 inch of water. Float the box into the tank and this will keep the eggs in shallow water. If you attempt to hatch fighter eggs in deep water they will normally hatch all right, but I have found that the fry usually suffer from swim bladder troubles.

Raising Fighters

For feeding of young fighter fry, I use Infusoria for the first and second days. This I culture from banana skins in 4 in. by 4 in. jars: an evil-smelling mixture at times but a good first food! After 2 days I give Infusoria

fins spread in the same manner as the males.

Selected fish are grown on in tanks spread around the fish house, and others are grown in jars. If fighter males are grown on in jars frequent changes of water are necessary otherwise the build up of bacteria seems to cause the finnage to suffer and become tatty.

Just one other thought. I have heard it stated that tropical fish cannot be kept and bred in fish houses heated by paraffin heaters. My fish house is heated in this way. The air pump is inside the fish house and draws in air from around the roof of the house. I do from time to time get trouble with oil scum on top of the water, but never have any trouble with the fish.

I hope that through this article I may assist some other aquarist in breeding a better strain of bettas!

CLUB TABLE SHOW AWARDS 1982

On 21st January the club got into the festive SPIRIT, the annual cheese and wine party. A very enjoyable night was had by all with plenty of chat.,food,and wine.

This night also heralds the .giving out of the table show trophies to the lucky exhibitors who have won during the year. These trophies are .awarded within the club to winners.at .table shows, so to win in `83 support the table shows.,even if you don't win you'll make Andrew Waller happy !

There were.two new trophies awarded this .year for the breeders classes. by Karen Blackmore and John.& Jackie Harrison which are worth winning so get breeding,

The awards were presented by our: Presidents wife Lucille Burges

.. Results as follows:-

Duboisson Cup	Best Characin	W. Chapman
Len Willis Cup	Best Killifish	W. Chapman
Stan Hyde Cup	Best Corydoras/ Brochis	A. Waller
S.L.A.D.A.S. Cup	Best Coldwater	D. Durrant
Saunders Cup	Coldwater. Runner Up	P. Rashbrook
Harrison Trophy	Best Breeder Egglayer	C. Cheswright
K. Turner Trophy	Best Breeder Livebearer	D. Cheswright
S.L.A.D.A.S. 1	Best A.O.S. Egglayer	T. Gilbey
Pond Trophy	Best Pond	T. Cooper
Members Challenge trophy	(senior)	L. Somner
Ed Nicolls Cup	Challenge Junior	T. Gilbey
Stan Halsey Rose Bowl	Highest Pointed	W. Chapman
Southchurch Cup	Highest pointed runner up	A. Waller
Abbot Cup	Highest Pointed Junior	S. Mackenzie
Brookes Shield I	Best Mini Tank	L. Somner
Brookes Shield II	Mini Tank Runner Up	A. Watkins
Hard Luck Cup	Best in Hard Luck	T. Waller
S.L.A.D.A.S. 3	Highest Open Show points	A. Waller
Jones Cup 1	Members Best Fish senior	F. Ray
S.L.A.D.A.S. 5	Members Best Fish Junior	S. Mackenzie
Giles Cup	Best Home Furnished	K.Holt
P.Boore Trophy	Highest T/S Points senior	W. Chapman

Trophies not awarded:-

Best Marine
Best Plant Junior
Hard Luck Junior
Meritorious Breeders Trophy

This evening also saw the donation to the society of a cheque for £25. Paul Mansfield, earlier in the year entered a letter writing competition in the aquarist magazine and was. outright winner.well done Paul and thanks to the Aquarist for the donation.Paul was-alsothe winner of another journalistic prize.for the writing BREEDING THE ORANGE CHROMDE. Ihis was the prize of £5 given .for the best .article in last years S.L.A.D.A.S.Journal-see, editorial for details.

This was adjudicated by Peter Capon who also attempted to award points to the novelty table show after a couple of pints of wine. The 1st was awarded to a Mr Andrew Waller for a KEY HOLE SICK LID,the. nature of the other exhibits escapes me but I beleive-the Waller clan won some of the other cards.

STOP PRESS

S.L.A.D.A.S. CHAPIONSHIP CLASS AT S.L.A.D.A.S SHOW is Class E .any labyrinth except fighters.

AMERICAN PUBLIC AQUARIUMS

C.Cheswright

In the summer of 1981 I was fortunate enough to visit the U.S.A for several weeks. During this time. I was able to visit a few public aquariums and also to collect some fishes. All this was carried out with the agreement of the friend I was travelling with, who has little interest in fish apart from a few goldfish. ...

I have, over the years, become increasingly interested in North American fish partly due to the travels of Howard Preston (a S.L.A.D. A. S. member) who has caught a number of them which were later distributed to me and partly due to my interest in Killifish, of which there are a number in the U.S.A.. (e.g. .american flagfish) .

This aside the article is concerned with two aquariums I was able to visit ,the Washington aquarium and the Steinhart aquarium in San Francisco. I was unfortunate to miss two very good ones, the Boston aquarium (which , I found out on the 'bus back to the airport has a very good collection of native marine fish.)and the New York' aquarium.,

The Washington aquarium is hidden away in the basement of the Department of Commerce and although free to enter we had to go through security procedures. The aquarium was relatively small but contained a good variety of fish, mainly native types. The marine section contained some Scorpion fish found as far north as New York, this surprised me. as I thought they were tropical fish. The freshwater exhibits included a number of sunfishes, e.g the Bluegill (*Lepomis macrochirus*) and *Pomoxis annularis*. Sunfish were also seen by the thousand in a lake not far from the White House, I was unable to I.D. These. The aquarium was well worth a visit.

The other aquarium, the Steinhart, is part of the California Academy of Science based in "Golden Gate Park, San Francisco. Our accommodation at the University of San Francisco was not far so one. day we ventured through, the smog to the museum, within, which the aquarium, is incorporated. There are 45 major exhibits (.from 500 to 6000 U.S. gallons) and 65 smaller ones quite some display. These were all spotlessly clean, quite some feat I should imagine. Salt water is pumped from San Francisco Bay and the freshwater varies from tank to tank depending on the occupants needs. By far the two most spectacular exhibits are a tidepool pond, this is circular and about 20ft across and ebbs and flows at regular intervals. A number of fish and invertebrates native to California are present, it seemed that every time you looked some new animal would appear. Passing up a spiral ramp a circular room is entered, about 30ft in diameter, that has around its walls a tank some 10ft high and 4ft wide. This has a lot of large fish (e.g Tuna and. Sharks) which can not be kept in conventional tanks. The reason being that these fish (Like the Mackerel are unable to move their gill covers and so ventilate their gills as do most fish. so whereas most fishes, can pass water over their gills in still conditions and thus live these types can't and would die. Thus to keep them alive a tank such as this is needed for the fish to swim constantly against a current.

The main displays consisted of fishes from across the world in as near natural conditions as are possible in the confines of an aquaria. These included Rift Valley cichlids, Archer fish (with resident insects to feed on), a display of Anemone, fish of which there must have been 200. One tank possessed rather a large octopus which spent its time trying to capture the visitors. Again they had a section with many U.S. species including Sun fish, shiners (American minnows), Fundulus, pupfish (some of which are found in- the Nevada Desert) and many, many, more.

The Steinhart takes the prize for the best aquarium I have ever seen and is probably because it has an active research unit investigating fish, most being profit making bodies.

Answers to puzzle corner

- 1) Archer fish , ,
- 2) nauplii
- 3) Green swordtail
- 4) Emporer tetra
- 6) Firemouth
- 7) Infusoria
- 8) Sea horse
- 9)Harlequin

Humble Beginnings

.A. Waller

The roots of my biggest achievement to date started in a very innocent fashion. The shop where I work on Saturdays had their usual weekly consignment of fish arrive at about this time (Two years ago)when I was just getting interested in *Corydorus* catfishes. I was putting the fish away I found- a little Cory,, about an inch long overall, which later turned out to be *Corydoras schwartzi* I paid 75p,took it home and placed it in the aquarium in my bedroom. This tank is 30x18x12 , semi-planted and situated by a window. It is far too over crowded (60 Corydorus and 25 loaches for starters)but by doing "stringent " water changes and feeding almost all. live food I can control it,

Anyway the *Corydoras schwartzi* soon found friends with the others of his kind and was soon forgotten. During the next year all I can say is" It grew and grew and grew",I don't know why it just did. So at the start of the last show season 'it was decided to show it at an. Open Show. I don't remember if it won or got a card but {to sooner or later it began to creep into the cards regularly and as this is one of. the largest classes this alone was. quite an achievement,

Our first incling that this was a bit special was when it won at Bedford 'in a class of 45, Now to win a championship class at an Open Show is quite an achievement and the chance does not come along very often so when you have a good fish it as as well to pick shows carefully and: not. take it out every week. The c.hampionship class for the corydorus . was at Leicester and if it came -in the first three it would qualify for the Supreme Championship. PROBLEM myDad would not drive up. There, but, fortunately Fank Chapman could take me and the judge gave me 3rd Hoorah!!!

I nnw had for the first time a fish that qualified for the Supreme Championship of Great Britain, should I keep it on its own and give it preferance with feeding, should I not take it out any more? I decided to forget the Championship and carry on as usual; hut it was not coincidence that as the fatful day approached. I found myself looking just a bit closer and feeding just a bit more often than usual Problem /Supreme Championship was to be held in South Shields, last year it was at Bethnal Green. Again my Dad refused to..take me he didn't think it was worth a 600 mile trip. Hoorah for Frank Chapman & .Dave Redman who put me up for the weekend, I won't dwell on what happened at the show but I came 2nd ,losing by one point. I wanted to tell you this because I .want people to realize what can be achieved with a lot of enthusiasm -NE'VER GIVE- UP.

The F.B.A.S. Supreme Championship was won by a DISTICHODUS . owned by Bill Hastings of S.E London,with 86 points. .Andrew Waller was 2nd with 85points-Well done!!!!

A FIRST IMPRESSION

Jill Ray

The one and only show I have attended was that held at Diss last year, for which our club organised a coach trip. Fred and I thought that as we were going we may as well have a go at showing some of our fish. Being as we were green to showing, and didn't know any different two of our entries were shown in tanks below the F.B.A.S. Size. (This being a minimum tank size of 100 x100x100m.in. -ED.).

We did not go with any intentions of winning only to take part and to learn something about showing fish. We had not been members of the club for long and to see how the other fishes were benched and to admire them was a very pleasing experience for us.

The show hall was quite large and had a balcony from which you could look down at what was going on, this was also open during judging. Whilst judging was in progress we took the family down to the park where we ate our lunch aided by the ducks. After lunch we visited the Waveney Fish Farm, only a few minutes walk. This has quite large grounds and deal mainly in coldwater fish, particularly Koi. The grounds are well laid out with a variety of ponds, from one in a Japanese style to others that would fit in the back garden. Tropical fish were also for sale, many of the coldwater fish having been bred by the farm.

Time was getting on so we had to return to the show to see how our fish had done. Judging was almost finished when we returned and so everyone was busy looking at the results as they were put up. We had won a second prize in pair's egg layers with a pair of gouramis, what a surprise this was. Whilst awaiting prize giving we chatted to other members about fish, keeping and showing and found this very informative. It was a lovely day out for Mum, Dad and the children, we are now hooked on showing.

Jill Ray is the club's social secretary and wishes to organise some trips to open shows, probably by minibus which shows have not yet been decided (At time of printing) but details will be given at meetings. One trip being organised is to the Brighton Show on 22nd May - see Jill for details.

DID YOU KNOW??

A Mr Lawrence Bellshaw, a coalminer from Melbourne Road Nottingham has recently spent £6,000 on converting his garden shed into a fish hospital. says Mr Bellshaw "I have removed stones and thistles from fishes throats and even fitted a glass eye. "

Adapted from Daily Telegraph 25/1/83.

SUPPORT THE OPEN SHOW ON MAY 14th IF YOU WIN A PRIZE IT
WILL BE PRESENTED TO YOU BY THE MAYOR

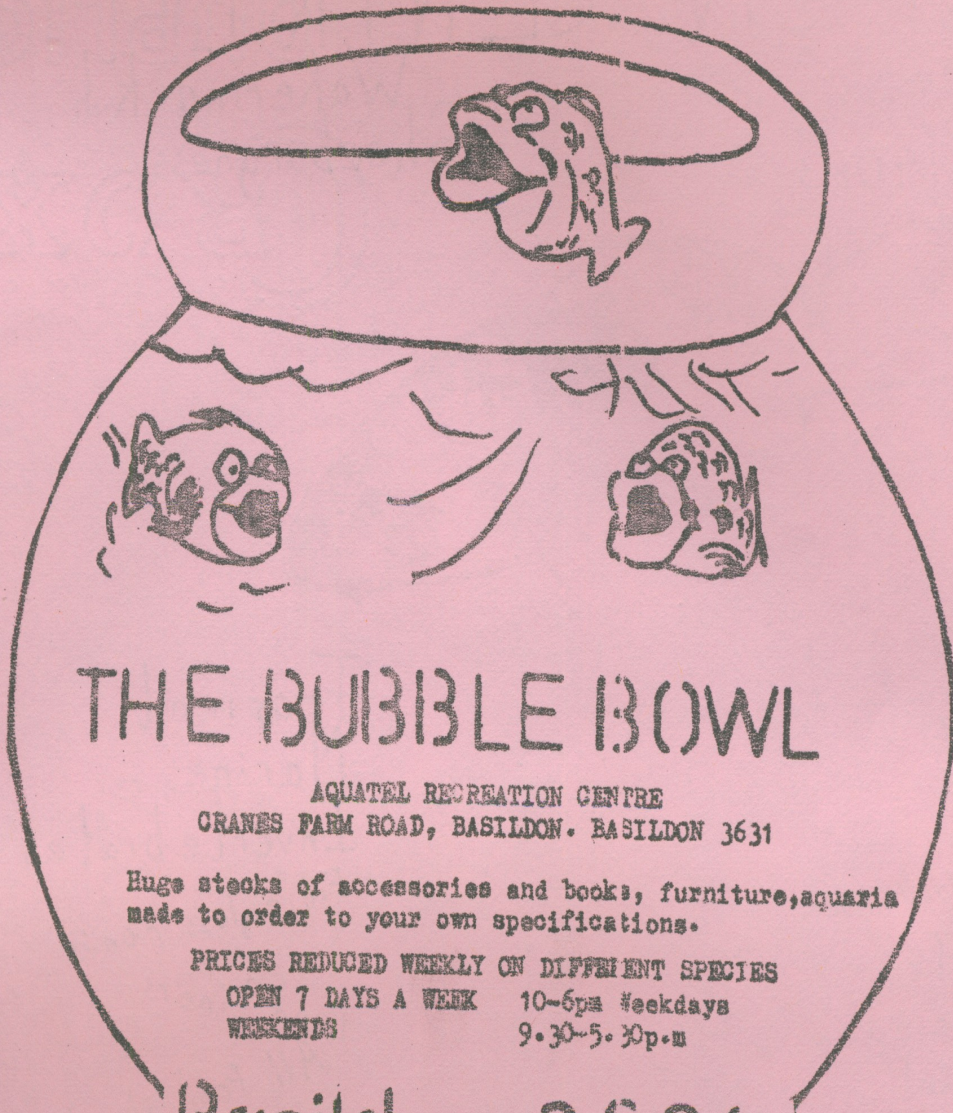
A special trophy has been donated, to be kept by the winner, for the best White Cloud Mountain Minnow in Class K. Even if you don't win a card you could win a cup. A prize has also been donated for the best Pencil fish in class C.

TROPICAL

MARINE

L
I
V
E

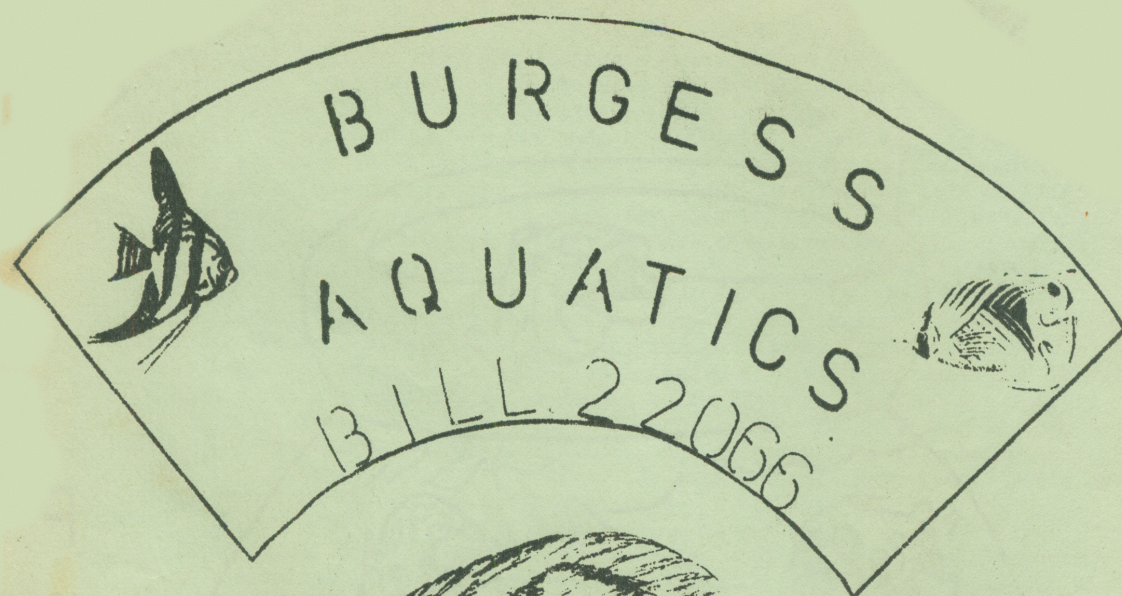
F
O
O
D



P
L
A
N
T
S

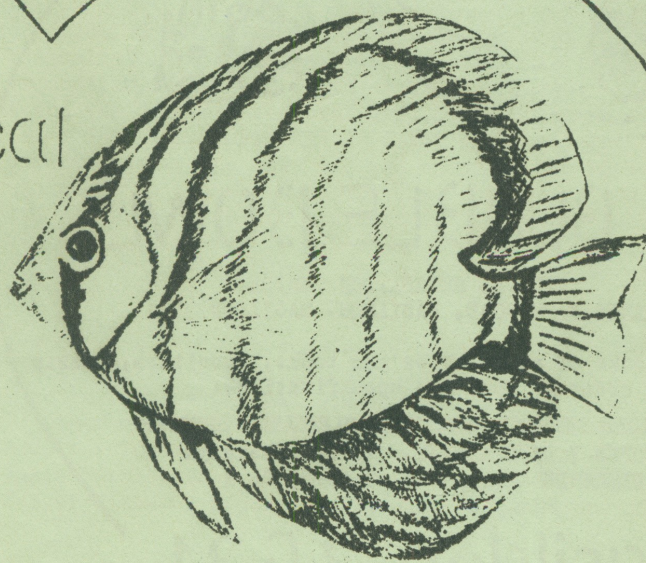
Basildon 3631

C
O
L
D
W
A
T
E
R



Tropical

Marine



Coldwater

727 Rcyleigh Rd, Hutton.

AQUATIC SHOP

Tele

Basildon

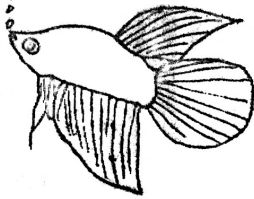
21680



Coldwater and Tropical
Fish and Plant

81-83 SOUTHERNHAY BASILDON ESSEX.

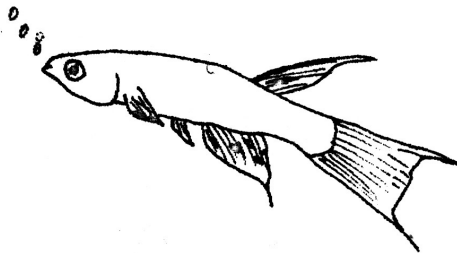
SOUTHEND



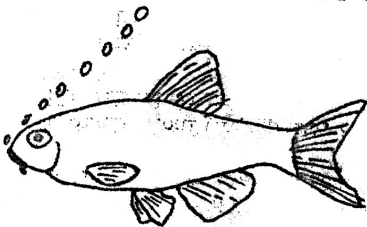
JOURNAL

LEIGH

&



DISTRICT

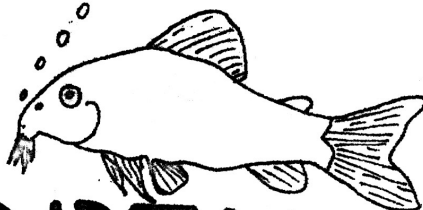


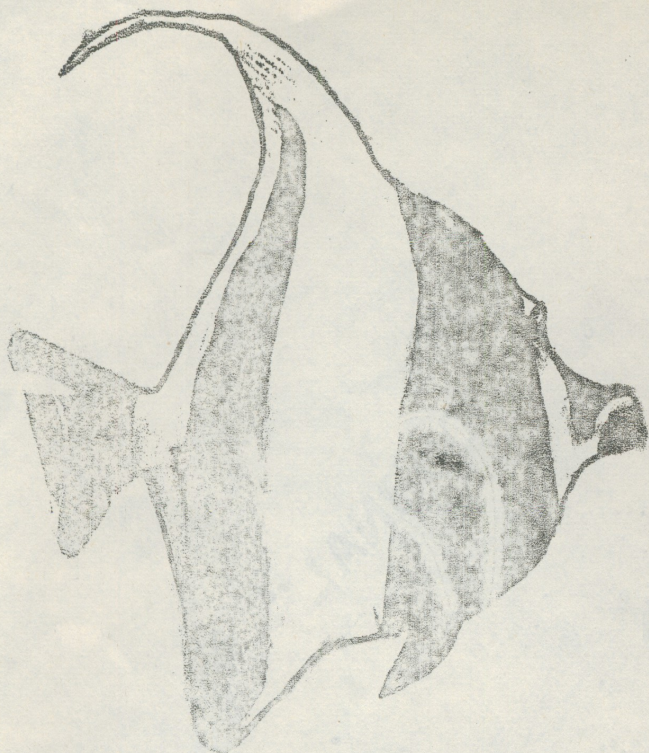
AQUARIST

SOCIETY



OPEN SHOW





MARINE
AND
TROPICAL
FISH

AQUARIUMS + MORE

SPECIALISTS IN MARINE - TROPICAL
AND COLDWATER
FISH AQUARIUMS MADE TO YOUR OWN
SPECIFICATION

STUDIO ONE
AQUATICS



OUR EXPERIENCE IS VAST, OUR ADVICE FREE

23 RECTORY GROVE,
LITCH-ON-SEA

SOUTHERN 714632

OFFICERS FOR 1983

PRESIDENT

DAVE BURGESS. 11 ,SILVERDALE AVENUE,WESTCLIFF-ON-SEA,ESSEX.
TELEPHONE: SOUTHEND-ON-SEA 337196.

VICE PRESIDENT

TONY COOPER. 98,ANSON CHASE, SHOEBURYNESSE, ESSEX
TELEPHONE SHOEBURY 54090

SECRETARY

DAVE CHESWRIGHT, 2, CEDAR AVENUE, WICKFORD, ESSEX
TELEPHONE : WICKFORD 2531.

TREASURER

DAVE BARON. 17,BELGRAVE CLOSE EASTWOOD, ESSEX.
TELEPHONE: SOUTHEND 527307.

EDITOR

CHRIS CHESWRIGHT. 2, CEDAR AVENUE, WICKFORD, ESSEX
TELEPHONE WICKFORD 2531.

ASSISTANT EDITOR

KEVIN BROWSE. 6, SEVEN ACRES, WICKFORD, ESSEX
WICKFORD 67640.

TABLE SHOW SECRETARY

ANDREW WALLER. 32,HAMILTON ROAD, HEATH PARK, ROMFORD, ESSEX.
TELEPHONE: HORNCHURCH 59982.

LIBRARIAN

FRED RAY. 20, WINDMILL STEPS , KURSAAL WAY,SOUTHEND--ON-SEA, ESSEX,
TELEPHONE: SOUTHEND 615137.

PUBLIC RELATIONS OFFICER

KELVIN HOLT. 18,STEBBINGS,LANGDON HILLS ,ESSEX.

CATERING SECRETARY

AUDREY CHESWRIGHT . 2,CEDARAVENUE,WICKFORD, ESSEX
TELEPHONE. : WICKFORD 2531.

SOCIAL SECRETARY

GILL RAY, 20, WINDMILL STEPS , KURSAAL WAY,SOUTHEND-ON-SEA,ESSEX.
Telephone. SOUTHEND 6t5137

COMMITTEE MEMBER

TERRY WALLER. 32,HAMILTON ROAD, HEATH PARK.,ROMFORD,ESSEX.
TELEPHONE: HORNCHURCH 59982.

EDITORIAL

Here goes with the second of this years journals. This issue as you may have noticed is a few weeks late. My excuse for this is that it's the .-Open Show issue and the show this year is about 2 weeks later than usual,

I would, here, like to thank all members of S.L.A.D.A.S. and of other clubs and societies that have sent their condolences, and have given, or offered ; help since the death of my father, Dave Cheswright on the 6th April. This was a sudden and tragic loss. An obituary is shown on page 12, by Peter Capon who, I believe has known my father some 2 weeks longer than I have.

This is Open Show day which was taken over by Terry Waller some 3 weeks ago from my father, and has had the mammoth task of sorting out what has, and what hasn't been done - due partly to the fact that most of it was in my fathers head. The rest being on bits of paper in writing that, as yet no one has been able to decipher. Terry seems to have sorted out most aspects, with a little help from others.

The show last year was one of the largest in the country, with just under 700 entries, and was also a financial success. The first few shows of this season have been a lot larger than usual, so maybe today we will go over the 700 barrier, this years targets

The committee page, as you have probably noticed, has not been altered, this will be remedied next time, the new secretary is Terry - I'll take over - Waller. At the time of going to press I cannot remember the name of the new committee member, sorry.

This journal is not as thick as I would have liked due to a lack of contributions, although I have managed to talk a few into writing in this issue, and what they have written is very good. Don't forget the prize for the best article of £5, at the moment there are not many members in the fight for this. Although I enjoy writing articles I do not have time to write enough to fill the journal, I would like to thank Terry who, nearly every time I see him gives me some scraps of paper containing articles - but you wouldn't want a journal written totally by 2 or 3 people.

I'm sorry to have to moan but hopefully it will inspire a few people. The other day I fed a tank of fish and one (A kissing Gourami, one of Doug's progeny) began spinning around the tank madly and plummeted to the base - dead. The fish was only young and has shown no sign of ill health. Do fish have heart attacks, or other such complaints.

Good luck in your fishy exploits of the day, and in the future and hope to see or hear from you soon.

All the best

Chris Cheswright.

PRESIDENTS PAGE

I have been asked to write this page for the Open Show issue, but unfortunately find myself doing so with a heavy heart. Still feeling sorry at the sad and unexpected loss of one of S.L.A.D.A.S.'s longest serving members, Dave Cheswright. He had been with our club for some 23 years and was on the committee almost since the day he joined.

He was definitely a key member of our society and an influential figure in many others around the south-east, and a few further afield. He was always willing to help others by giving advice freely to individuals or by a talk to clubs. If it was anything to do with fish Dave would be there, bright and cheerful and reliable. I know he will be missed by many, many people. But as I said at the beginning this is Open Show day, and the show must go on. Dave would not have had it any other way.

Now let's get onto something more cheerful, as an Open Show day should be, and bid a warm welcome to all the people taking part. I hope that we have plenty of exhibitors, public, club members and helpers, without the latter there would be no show at all. I would like to take this opportunity to thank you all for coming to this annual event and buying this journal - at least I hope you did!!

Let's have good support for the show and don't forget to enter the raffle, draw and tombola, with plenty of participation in the events throughout the day it all helps to create a happy atmosphere and this is what we could all do with.

Cheers for now, good luck in all you do at the show and see you next year

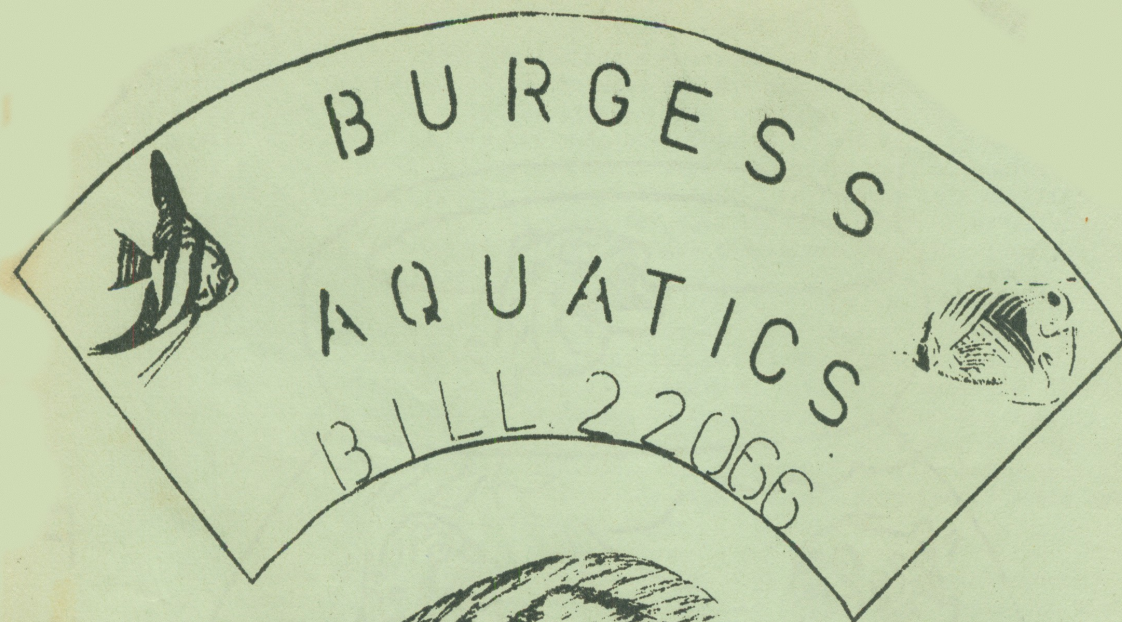
Dave Burgess.

From a few bits of paper from Terry Waller;

Bet you don't know where Brachydanio rerio comes from? Try pronouncing this - KOH YAO YAI & KOH YAO NUI islands !!!

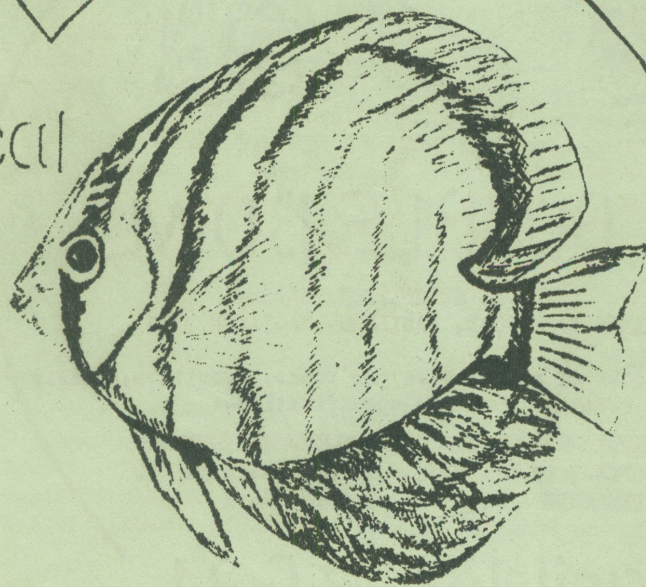
SENSATION-STOP PRESS.....The Eel swallowing record has been broken by one Mark Ryder who swallowed a pound of baby eels (Elvers) in 29.7 secs. Eel take some beating!!!

An entry in Class E at Croydon was *Colisa TUNA*.



Tropical

Marine



Coldwater

727 Rayleigh Rd, Hutton.

CORYDORUS Terry Waller.

Most of us started out in this hobby with a community tank. Here we grouped together the most eccentric collection of fishes and plants ever mustered in one environment. Some aquarists evolve from this beginning into ardent, dedicated specialists in many varied fields of aquatic endeavour. Others might have left the involvement part and reached out for the dizzy heights of judges or lecturers. Alternatively many are quite content to stay with the community tank. Whatever your pursuits or aspirations one thing is certain at one time or other we; have all possessed a little fish..that we brought under the title of a "Cat",..It, was. .only, after we got. home that we found out- the. true name was *Corydoras*. *Corydoras* what was not important. We brought; it because the nice man in the, shop told us it would clear up all the uneaten food. or rubbish in the tank!!! We might have been attracted by its cute whiskers, or even by the fact that it winked at us ??? well just to dispel a few exaggerated beliefs- they will not eat rubbish or leftovers, . they have barbels not; whiskers and above all they do NOT wink at you.

ANATOMY OF CORYDORAS

Cor-ee-dor-as; -means helmeted, this refers to the general head shape. They grow between 2"-3", with a couple of species only reaching 1¼". A full size Cory, is possible to obtain in almost any size of tank, whether kept in an 18x10x10 or a 6 foot monster tank,.

The fish has a semi-labyrinth organ which allows it to live in waters that have a low oxygen content. It only uses this organ when it has to, so if yours are forever hurtling up to the surface for air look to the supply in the tank. This organ also allows the fish to live out of water; for short spells, provided it is damp and humid. They move about by using the very strong pectoral fins. They are shoaling types, moving about in groups- searching in the gravel for food, . They are very heavily armoured with overlapping plates rather like roofing tiles. These are so tightly overlapped they protect the fish against white spot or attacks by bacteria or fungus. The swim-bladder is also encased in bone. All fins have an extremely powerful first ray, especially the adipose and pectoral. In fact the spines on the pectorals are able to lock in; the open position, this means that if swallowed by a predator they lock the pectorals which stick in the throat and the predator quickly spits it out. Because of the spines on the fins some care must be exercised when handling them as nasty stabs and cuts can be obtained by clumsy handling. The tail and dorsal fins are very large, but in spite of this the fish are poor swimmers.

The mouth, which has teeth, is positioned under the head, Cory's are thus bottom feeders. At the front of the mouth are 2- or 3" pairs of. Barbels that are important for locating food amongst the debris or mulm on the river bed. As one can imagine a certain amount of barbel and nose damage, is often encountered. put under NO circumstances must salt be used as a cure. No the eye does not wink at you, it revolves in the socket, being able to look in all directions.

There are scores of species listed but it is probable that there are only a few types, the rest being only area varieties of the holotype. This makes identification very difficult and frustrating. Colouration and pattern seem dependant on the type of river bed and this ties up with the basic water conditions. ie. a mottled pattern is found in rivers having a pebble bed (This is generally alkaline), brown or bronze fish are found over a muddy bed or rotting vegetation (This being acidic due to the rotting vegetation.). A very lightly coloured fish might be found on a sandy river bed. Cory's belong to the family Callichthyidae along with their close relatives *Brochis*, *Callichthys* and *Haplosterma*.

HABITATS.

Cory's are found in freshwater streams and tributaries of the great rivers of Brazil, Venezuela and Colombia, waters tend to be on the colder side, due to the overhanging vegetation shading the water, so although found in the rain forest belt it does not mean that it requires high temperatures. The famous ichthyologist Bloch. described the fish in 1794, but as their appearance suggests the fish goes back millions of years. In fact one of the oldest fish fossils found was a Cory!! It first appeared in the area of Argentina. This species was named *Corydoras revelatus*, some of the most popular species found living with corydoras are Angel fish, Characins, Discus, Cichlids and Rivulins. Many predatory types are also around including the giant Arowana. Cory's enjoy a temperature of about 72, but are not too perturbed by a drop to as low as 65, this in fact stimulates spawning.

DIET & FEEDING

Because of the position of the mouth care must be taken with the feeding and diet. They will NOT eat rotten or mouldy food left by other fishes. The feeding of flake food is useless, especially if kept in a community tank. even if the flake reaches the bottom there is precious little goodness in it for Corys. Much better food is Ox-heart, mashed sprouts, peas, etc. Earthworms, tubifex, whiteworms are also taken as is freeze dried tubifex (These can have strips of lead wrapped around and "bombed" in.). ;

CONDITIONS .

To keep Corys, in good condition a few basic fishkeeping rules must be obeyed;

- 1) A change of water at regular intervals removing rubbish on the bottom and at the same time refreshing the water.
- 2) A good diet properly served up,
- 3) Well aerated water with plenty of top cover and plants
- 4) Fine Soft gravel which will restrict damage to the barbels and nose.
- 5) Care when catching, try to use your hands. if a net must be used make sure the material is fine (A coarse net allows the spines to penetrate making it impossible to remove without body or fin damage.). You can make such a net using some nylon sheeting stitched around an old net frame .

The most common causes of death, bearing in mind that they should live for at least six years is starvation (from poor feeding) , miss handling , haemorage a red blotch on the body brought about very often by dealers injecting oxygen into the bag when sold. Pollution or high temperatures (Mid 80's) also account for many deaths,

When selecting Corys. look out for bent or broken fin rays, this can also come about when the fish is caught for you. Always check barbels, worn ones won't grow back. A good guide to a healthy fish is one that is sitting on its pectoral fins, or better 'still' is hovering just above the gravel. The speckled varieties should have a metallic sheen. gleaming. under the light.

BREEDING .

The most popular species bred are *C. paleatus*, *C. hastatus*, and *C. aneus*. A small tank is set up with about 6" of water and some clumps of plant, such as Java moss. fish are introduced in trios or fives, always with more males than females. The fish should have been separated and well fed prior to introduction. After they are introduced they must be left to it. Just keep feeding them well at a temperature of about 72°F. When they have settled spawning can be induced by frequent water changes and by sudden drops in temperature, down to 64, or so. eggs are laid on the plants, but more often on the glass sides of the aquarium. The parents can be removed and the eggs hatched in the spawning tank, or they can be removed with a razor blade and placed in an ice cream box to rear.

In both cases the water should be .lightly aerated and when they hatch feed them on brine shrimp followed by micro worm.Soon they will take other foods. They seem difficult to breed the first time but once it has been achieved they seem to get into a regular pattern and spawn & spawn &.....

FISH COLLECTION IN THE U.S.A.

C.Cheswright

My collection of fishes began with a visit to a British Killifish Ass. member in Rochester, New York who was kind enough to put my friend and I up for a couple of nights.After leaving Pittsburgh airport and arriving inRochester at about 10 pm., we got a taxi and found Jeff at work in a windowless building full of computers. We returned to his house and I was up until about, 3 or 4 , in the morning talking fish,The next day we got on a Greyhound bus for a couple of days in Toronto.On returning to Jeff I aquired a polystyrene box and two species of goodeas(livebearers), one species of which gave birth to about 12 young,all of which survived the ensuing journey, These fish were *Chapalichthys. pardalis* and *Characodon lateralis*. Suitably armed we headed south by plane to sunny Miami,Florida. We booked into our hotel and proceeded to spend a week lounging on the baaches and collecting shells,after a 5 week period of criss crossing the States,

During this time the fish were kept in the box and checked morning and night .changing water when necessary. (This was kept in a tray I found, in the fridge.What the chamber maid must have thought I don't know),the fish-were not fed at any stage,

One day,-after finding that a bus went there I made a trip out.to Miami Springs,about an hour from Miami;a spot recommended by J.H.Preston who had previously fished there.Thus. armed with a hand net and some, plastic bags I began to fish in a stretch of the Miami Canal,wading in about knee deep,.An old washing- up bowl found by the roadside proved useful to sort the fish out in. A number of species were found,the Mosquito(*Heterandria formosa*),*Gambusia affinis holbrooki*(A sub species that possesses black markings») *Poecilia latipinna*. These,unlike .those seen in this country were very vividly coloured with a lot of blue and orange.),a species of darter and some cichlids,These cichlids are not native to the area but have been introduced by aquarists and have survived due to the semi tropical climate. It is for this reason that a number of fish are prohibited,such as the Clarius Catfish and Piranas-for obvious reasons! These cichlids appeared to be Jewels (*Hemichromis bimaculatus*) and Convicts (*Cichlasoma nigrofasciatum*..)

One species that;.I had especially been looking for appeared to be absent from where I was fishing, an open spot with Elodea in the water,this was *Lucania goodea* a most beautiful fish which as far as I knew was abscent from the. U.K.However, on moving up the canal to the shade of some fir trees I found:sufficient of these fish to make it worth while. My bags now full I returned to the hotel to sort them. out and change some of the water.The fish sorted out I went for a swim on the beach where my friend had been all day.The next day was spent.on Key Biscayne,an.island just off Miami-where I saw a number of marine fish.Also I took .a look in some water in the tnangrove, swamps. This was an evil: brown colour and stunk but the fish seemed to enjoy it as the water was teeming with gambusias and mollies (This was also very saline)and the most enormous mosquito's which probably fed the spider whos web I got entangled in(The spider was about 6"across)

Another incident involved Miami Port where I found a pool on a piece of waste land that was full of fish and surrounded by Fiddler crabs(Which have one claw larger than the other) I saw a few cichlids,livebearers and a killifish which I presume was *Adinia xenica*.I had just begun to dip in

my net when up drew .a car containing two. security guards who informed us that we were on private property (There had been no notices.),we left as . they didn't look very friendly and that species had to stay in the, U.S. A,

With my box and suitcase and,, friend we returned to this country via New York where we stayed for one night, the bags were checked here. Customs was passed without difficulty (I had an import licence) .On arriving home the fish were sorted out .not one had died, showing how tough they are as they had just been caught put in a bag, starved, spent a number of nights in a hotel room and travelled 5000 miles in the hold of 2 planes.

The fish are,nearly 2 years later well and a number of them have bred successfully, exept the darters which I am unable to sex .These have been tentatively named *Ammocrypta.beani* ;although this is by no menns final as there are "dozens of other possibilities. Unfortunately I was without my own transport which restricted me to public transport which although very cheap restricted me to routes, not always the best to collect fish. It seems logical to me that the more spots sampled the greater will be the variety of fishes found. . Next time I will have my own transport,!Ihope..,

TABLE SHOWS

A.,Waller

Since I took over the job of table show sceretary at Christmas I have been delighted to see the response from fellow Member',especially those to which showing is new this year. Already this year a good selection of. fishes have been benched and I can,.only hope this enthusiasm is shown at tho Open Show and through the rest of the showing year.

These are the first prize winners so far:-

Q Swordtails	T.Waller (75 points)	Qy	P. Osborne	(62½ points)
O Male guppies	W. Chapman (74 points)	Oy	D.Eke	(76 points)
P Female Guppies	W. Chapman (67 points)	Py	C. Ayres	(62½ points)
E. Labyrinths	D. Hounsell (75 points)	Ey	D.Eke	(71 points)
Ea Betta splendens	W.Chapman (71 points)	Eay	C. Ayres	(66 points)
J Rasbora	A. Waller (70 points)	Jy	P. Osborne	(63 points)
Db Dwarf Cichlids	W. Chapman (79 points)	Dby		
Dz A.O.S. Cichlids	T. Waller (74 points)	Dzy	D.Eke	(63 points)
T A.O.S. Livebearers	A. Waller. (73 points)	Ty	C. Ayres	(65 points)

I would also like to thank D.Durrant ,M.Waller,D.Cheswright.,C.Cheswright, K. Browse, D, Burges and B,Myers ,for judging the shows. Lets all keep the.good work up, hope you do well at the Open Show. Also look forward to the Inter club show on the 21st June.

ED, -The suffix --y aftor the Class is to indicate the Junior division.

DID YOU KNOW?

Tilapia grahami from .Lake Magadi Africa is found in temperatures of up to 104° C. in solutions more resembling soda solutions than water!!

A club Secretary in the Midlands some years ago was a Mr. Worm and .the show secretary of South Park Aquarist Society was.a Mr. Herring !! The Business Manager TFH is a Mr Fishman.

An important Discovery T.Waller

I can now put a date on when the demise of cultivated livebearing fish began-1952. In a National magazine of this year appeared a picture of a male Red.Wagtail Platy with a Yellow Wag. -female.. The caption underneath reads "A beautiful pair .of platies, peaceful and easy to breed."

Belonesox belizanus D.Cheswright. Copyright reserved

This species was first found in Belize,British Honduras,but is well spread through Mexico,etc. Originally it was caught from cloudy and polluted waters ,backwaters,marshes and lakes. It is one of the larger livebearers males reaching 100mm,and .-females 200mm. In captivity there is a tendency to be much smaller.The common name of Pike Top Minnow aptly describes which is typical in its habits of any "Pike" type fish. It remains still for very long periods hidden among plants,etc,and is only active when hungry, when a lightning dash enables it to catch a live fish which is swallowed tail first in most cases. The species has a long "Pike like" body with a beak-like mouth.Colour is almost black on the upper body fading to a light gray below there is a black mark on the caudal peduncle: in the right light greenish/bluish highlights can be seen on the opercula.

This is a predatory species and will only take LIVE FISH of a suitable size,they will normally ignore any that are too small and will starve in preference to eating anything else other than fishes of the right size. They have been known to catch a fish which is too large and choke to death. They appear to prefer fishes that are long and relatively slim-bodied and will not even attempt to eat round-bodied fish such as Cichlids, (Which also have hard fin rays.).They do not kill for the sake of it but only when hungry.The jaws appear to dislocate,somewhat in the manner of a snake, in order to swallow prey,which appears too large to swallow.This dislocation is most noticeable in the fry,which if kept in small aquaria can be closely observed. I have tried feeding the fry on Daphnia and tubifex of which they appear to eat the former but not the latter,They do not grow unless they are fed with fish of ever increasing size,They will eat each other only if not given other food and then -only if their brothers and sisters are small enough to swallow.Adults will go without food until they are hungry and one can have many fishes in the aquarium to feed them in the long term.Food consumption can be as little as one 2"fish every 3/4 weeks.They will last much longer than this without any food at all. Fry and young specimens,however waste away very quickly unless fed regularly. It is therefore essential to feed the fry well at first,say,month,after which they will grow reasonably well provided they are fed 2 or 3 fish every few days. I have also tried feeding adults on tadpoles and baby frogs,one large female consumed several of the latter but within 2 hours they were swimming about after being disgorged.I have been told that "strips of meat"can be fed if moved in the water. I..have;found this to be unsuccessful and if it is taken,in my experience,it is disgorged later. Any person taking on this species must be prepared to supply them with sufficient fry.

Conditions. One should always bear in mind the wild conditions of any species. A tank 24"x12"x12" is a suitable size for a pair,nothing larger is required as they do not need much swimming space.In a smaller tank there is the possibility of the female eating the male.This happened to my first pair-luckily she had been fertilized.The male tends to stay to the rear of the female,a position common amongst species where the female is known to eat the male. No aeration or filtration is needed for this species indeed they are not at all happy with moving water-again think of.....

the wild conditions and the fishes habits - other fishes can move around-: . "Pikes" pick them up,as, they come past.

My first experience of this species was in the early 1970's when Howard Preston brought back wild specimens.80 fry were born and all but 6 given away. I have a note, of only one .other aquarist who raised these to maturity and then bred them. Of the 6 I kept one lived to be over 4 years of age. I did not bother to breed the originals or offspring,and..as far as.. I know the strain died out. Even with a large fish house and other aquarists giving fry it was extremely difficult to obtain enough to feed even six over the first few weeks.

I obtained them again in 1980/1 from the same brood,ranging in size from 25 to 50mm. Due to this size difference they had to be kept seperate but 2 were eaten;2 died,4 were farmed out and 4 retained.. By June 1981 I had 2 females and 1 very thin looking male. Of those farmed out 2 females were left. These were obtained, but. one of them died on the way home (Probably due to shock).The male was placed with the best female,the other 2 died August 1981 (1½ years old).By early September the remaining female :was pregnant; and the male was removed. The tank was filled with Elodea for the fry to hide in.The female ate. nothing for 4 weeks,even though food was in the tank,and produced 62 .fry on the nightof 26/27th September. I do not know if there were any more fry born,and the rest eaten by the mother, however the female showed no interest at all in :her fry-they were probably too small for her to bother with.The fry were, approx. 16mm long,and scattered all over the aquarium. The only difference between.this and the, last brood was that the last one consisted of fry with a bright red spot at the base of the anal fin.This was completely absent from the 1981 brood. In the earlier case it faded slowly as the fry grew.

All but 8 of the fry were distributed and by the end of January 1982 only 5 out of the 8 remained.. 1 choked to death and the other 2as far as could be seen suffered from under-feeding..The 5 were then 50mm long.They had in 4 months consumed 550 other fish,starting from Guppy fry size.Most were from my own breeding plus a few at the start from another Southend member.This number was by :no means adequate,you have been warned!! A further 40 were born in December 1981 but due to the bad weather :they could not be distributed and. were fed to the previous brood. The parents have since died and I hope to obtain a pair from the offspring.

This is an easy fish to keep-PROVIDED the food problem is realised.They require no special conditions just the odd water change and the removal of any prey which they have killed (This happens when they cannot turn a prey around to swallow it), the fish is usually bitten in half, this the Pike will then ignore.Temperature is no problem provided it is 21°C (70°F) or a bit above

SWIMMING DANGER. . . .C.Cheswright.

This is not for the squeamish amongst you. In South America there are a group of catfishes ,the Trichonycteridae,which are naked and loach like. Many in this group are free living and dig their food from the soft sbstrate but others have come to live on the bodies of other fishes.They pierce the skin with spines around the jaw and opercula and feed on the blood. Others live in the gill cavities of other catfishes(e.g *Sorubim* sp.).These fishes are named Candiru,and one particularly nasty one has a habit of entering the urinary tract of bathers. The fish does not enter intentionally but swims against the current as it would when entering the gills of a fish. In order to remove it(*Vandellia* sp)a sugical operation has to be performed. Is it any wonder that the .natives wear protective gear when bathing!

OPEN SHOW REPORT.

C..Ches wright.

The first Open Show of the season was at Haringey, on March 6th, and the season seems to have got off to a good start with an entry of 460, very good for their first show. Any more entries and they'd have run out of space for benching and people!! I was at a party in Crystal Palace the night before and managed to crawl to the show to meet up with my Dad who had taken my entries,

Fred and Jill Ray were there, they had set their alarm for about four in the morning but never got up till some hours later!! Doug Ridgewell and the Chapman's were also there. As the day went on it seemed to get hotter and hotter into the 80's and a few fish suffered the consequences, but there seemed no intention of turning it off.

The judging went on and on, due to the absence of one judge and the large entry. It finished sometime after 4pm at about which time a strange smell of burning started to waft down the stairs, This turned out to be their dinner!!

A number of prizes were won; Doug gaining a 1st in pairs and a 2nd in the Breeders with his Moonlight Gouramis, my Dad got a 4th in Killifish. I got a 1st 3rd and 4th and Will Chapman got about four 4th's.

The best fish in.. show was in class E and was owned by Dave Winder. The best exhibit; however was in class Xb-m (Breeders Egglayers), Overall a good show with some nice cups and some good quality fish. Perhaps next time they'll turn the heat down a little,

Forth coming dates:-

May 22nd Brighton, Sussex.

June 5th Mid Sussex

Sudbury.

18th East Dulwich

26th Strood

July 3rd South East London.

More dates next issue, only those within easy reach are shown, those further away are shown in the F.B.A.S. Bulletin.

***Procambarus clarkii*-The Louisiana Red Swamp Crayfish**

Chris Cheswright,

Over the past few years there have been an increasing number of tropical freshwater invertebrates in the shops. Amongst these are crabs, shrimps and crayfish. The crayfish is a crustacean, a group that is predominantly marine but has some freshwater members and one or two land types (e.g. woodlice) and like the closely related insects do not grow at a steady rate but by a series of stages. They go through a stage of nongrowth in size followed by the skin rupturing and shedding of the outer skin and an increase in size as the body swells and hardens. The outer coat is hard to protect the animal.

The crayfish can be kept in with fish as they appear too slow to catch any. They will eat virtually anything from cat food to tubifex but should be supplied with ample quantities of plant material. They can be kept in any container from a small tank upwards provided it is covered as they have a habit of climbing out and drying up on the living room carpet.

Given the correct conditions they will grow rapidly and reach sexual maturity at 7cm (6 to 8 weeks old). They have a tendency to be cannibalistic and it is essential to keep adults separate when not breeding to avoid loss

CONTINUED PAGE 13

The sudden unexpected death of Dave Cheswright on the 6th April deprived the tropical fish hobby of an outstanding member. His efforts over the years have contributed to the knowledge, particularly of the rarer species of livebearers. He was a founder, member of the, Southern Livebearers Aquatic Group and successfully bred and distributed many of the species brought into this country. His interest in livebearers went back a long time as for many years he maintained his own strain of Moon Platys.

Dave was, always willing to help and advise, fellow aquarists,; he was always available to give talks to Southend, Leigh and District Aquarist Society, or indeed, any club within a reasonable distance of his home in Wickford. He was also a familiar sight at shows around the South.

The writer first met Dave in August 1960 after, answering an advertisement in the Aquarist in which Dave suggested a Society to serve the Billericay Wickford area of Essex. Although this attempt was unsuccessful, Dave soon after joined the Somthend club and was almost immediately co-opted onto the committee as Treasurer. He occupied this post continuously until November 1972 when he was elected as President. From November 1974 until July 1979 he was Club Secretary when he again took on the Presidency. At the 1981 Annual General Meeting at his own request, he relinquished the Presidents job for the post of librarian, to enable him to put all his effects into organising the 1982 Open Show. This year he again took on the task of Open Show Secretary but was also elected to the general committee as club Secretary.

Prior to the writers first acquaintance with David he had been keeping fish for a considerable time. He was a junior member of East London Aquarist and Pondkeepers Association and in 1948 took first prize in their Open Show in the class for *Macropodus opercularis*. In the first East London all breeders Show in 1951 he won the first and second prizes in the Dwarf Gourami class, Daves' more recent show successes are, of course, common knowledge.

David was S.L.A.D.A.S delegate to the F.B.A.S; a leading light, in the Association of Essex and East London Aquatic Societies and also a member of the British Aquatic Study Society, and had been a member of the Southern Livebearers Aquatic Group and Newcastle Guppy and Livebearer Society.

His many friends in Societies around the country will I know wish to join S.L.A.D.A.S. members in extending their heartfelt condolences to his wife Audrey, and his children Christopher and Anne on their sad loss.....

PETER CAPON.

Croydon show report

Doug Ridgewell

I went to this show by train, arriving at London Bridge in good time at 9a.m. With only about another ½ hour to the show a good start, but owing to unforeseen circumstances, namely British Rails timetabling, I didn't arrive until 11 a.m.. But as I had sent my entries in I soon had my fish benched.

Mrs Anne Hurd had the mammoth task of sorting out 300 late entries, well done !!

Will Chapman, Roy and myself, after benching our fish went for a cup of tea and a look around, then for a walk (the only time it didn't rain all day). Unfortunately there were no fish shops open in the area but there were at the show stands selling goods. However we ended up in the nearest pub for a quick drink. We just reached the hall as it started to pour down again.

Paul (Walthamstow) Mills was sure that they would win in the quiz between us (HA 'HA) rubbing it in by winning two 1st. But don't worry Southend I got my own back by winning a very nice tank in the raffle that he wanted,

Bob Esson presented the trophies, having a marvellous time kissing all the ladies. Dave (East Dulwich) Winder also got a kiss I am not sure whether Bob needs glasses or Dave needs to change his new hair-style in a hurry..

Will saved me all the trouble of getting home by giving me a lift.. So I was pleased when he won the F.B.A.S. Championship Class-Db, He was today representing Corringham A.S. I was the only Southend member, receiving 2nd in Nb-m and 4th in Xb-m, Derek Ford with his *Melanochromis johanni* won best in show. Tonbridge getting highest pointed society.

There were a total of 524 entries judged by 8 judges.

This was the first Open Show I had attended at Croydon and was very impressed! But as our club members will understand it was the first show without Dave, and for me was rather sad.

From pg,11

They can be sexed as the female is broader, and has shorter claws than the male and her genital opening is on the 2nd pair of walking legs, from the front and on the 4th in the males. For breeding a tank 90x30x30 is adequate with plenty of cover in the form of rocks and caves and at a temperature of 23-26 °C. The female should be added to the tank 1-2 days before the male on addition of whom mating often occurs within 2 hours. After mating he is removed. The female will incubate the eggs (100-300) internally for 4 weeks after which they are released and attached to her underside for another 2-3 weeks, during which time she hides in a cave.

The eggs hatch and the young disperse, the female now tries to eat them, and should be removed- she will be ready for spawning in 12-16 weeks. The young will grow rapidly and must be provided with plenty of shelter due to the tendency to eat each other. An ideal strategy is to place them in groups of 20.

These animals are very entertaining and seem to be very uninterested in the fish, and thus make an ideal addition to any tank. The only problem is their habit of climbing and cannibalism, which can be remedied by supplying adequate cover and keeping only a few to a tank.

A .secret recipe?

A.Cheswright.

Whats this you may ask,some secret way of growing you fish to enormous sizes?Well,it may not do this to your fish but in excess it will do it to your waistline!! This article will be of particular interest to our President Dave Burges and to Paul Mills,of Walthamstow who has been reputed to have eaten at least a dozen chocolate eclairs at one sitting.

Yes its that rare Eastern (OF Chelmsford anyway)delicacy of BREAD PUDDING.

Well here goes with the ingredients,this makes quite a lot and can be decreased in quantities to make less.

1 Stale loaf(Any sort.)
1lb Mixed Fruit.
¼ lb Suet
¼ lb Margarine (This must be melted)
2oz Mixed Spice
2oz Sugar
1 Egg

And this is what you do:

Soak the bread in a bowl of cold water for about 15 minutes and then by squeezing the bread remove most of the water-a nice messy job.

Transfer the bread into a large bowl and add the other ingredients to the mixture.

Mix well with your hands,no implements are to be used,until all the lumps of bread have been broken down.

This mixture is then placed in a tin to a depth of not more than 2".

This must be cooked in a slow oven for 2-3 hours until brown and crisp on the surface.

Allow to cool and sprinkle with sugar.

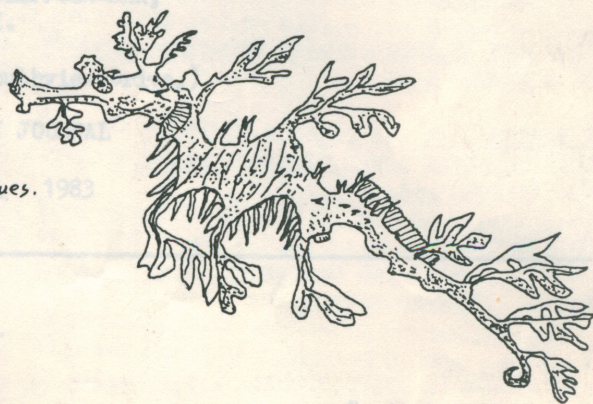
The bread pudding can be eaten hot or cold.It is important to cook it slow or else it will dry out. The above recipe can be altered to your own taste.

Thanks to today's judges Messrs,Beadle,Cocker,Pannell,Cottle,Nor»nha,
Edwards ,EssonSaxby , King, Dale , St illwell,
Also to the specialist societies who do a lot of work, for free,in the setting up of their stands.

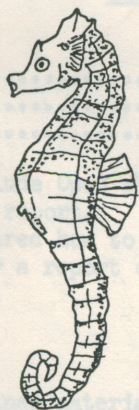
Thanks also to all those non members of S.L.A.D.A.S. who come along every year and do a lot of work.

Southend, Leigh, and District Aquarist Society

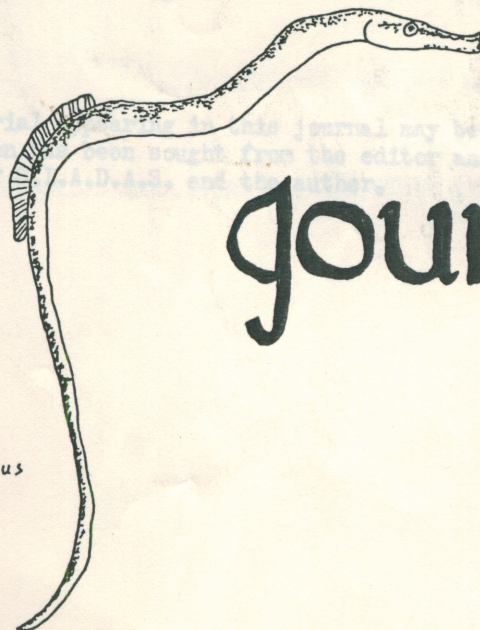
Phycodurus eques. 1983
Sea Dragon.



Hippocampus hippocampus
Sea Horse



Entelurus aequoreus
Snake pipefish



Journal

1983

SOUTHEND LEIGH AND DISTRICT AQUARI3T SOCIETY (
founded 1935 or before)
Affiliated F.B.A.S. & A.E.E.L.A.S.

Meetings are held on the 1st and 3rd Tuesday of each months the meeting commences at 8.3.0.pm.

VENUE:-

ST. ANDREWS HALL,
ELECTRIC AVENUE,
WESTCLIFF-ON-SEA,
ESSEX.
(Entrance in Southview Drive)

BI-MONTHLY JOURNAL
No. 93

CONTENTS

OFFICERS FOR 1983	Page 2
EDITORIAL	3
PRESIDENTS PAGE.. .. .	4
'LITTLE TOMS APPEAR IN LONDON'P.CAPON	5
SPARE PART F. RAY	8
OPEN SHOW 1983, T. WALLER.... .. .	9
SOME RECENT SHOWS.... .. . C.CHESWRIGHT..	10
THE BITS AND WHAT THEY DO C.CHESWRIGHT..... .. .	11
CLUB REPORT A.WALLER	13
WHERE HAVE ALL THE F/A GONE T.WALLER	

COPYRIGHT..Any original material appearing in tbia journal(Exep)ing copyright reserved) may be
reprinted provided perniasion has been sought from the editor and full mention is made of
S.L.A.D.A.S.and the author.

PRESIDENT

DAVE BURGESS. 11,SILVERDALE AVENUE,WESTCLIFF-ON-SEA,ESSEX.
TELEPHONE: SOUTHEND 337196.

VICE PRESIDENT

TONI COOPER. 98,ANSON CHASE, SHOEBDRYNESS, ESSEX.
TELEPHONE SHOEBURY 2743

SECRETARY

TERRY WALTER, 32,HAMILTON ROAD,HEATH PARK,ROMFORD,ESSEX.
TELEPHONE I HORNCHURCH 59982.

TREASURER

DAVE BARON.. 17,BELGRAVE CLOSE, EASTWOOD, ESSEX.
TELEPHONE SOUTHEND 527307.

EDITOR

CHRIS CHESWRIGHT, 2,CEDAR AVENUE,WICKFORD,ESSEX.
TELEPHONE WICKFORD 2531.

ASSISTANT EDITOR

KEVIN BROWSE. 6,SEVEN ACRES ,WICKFORD, ESSEX.
TELEPHONE: WICKFORD 87640

TABLE SHOW SECRETARY

ANDREW WALLER. 32, HAMILTON ROAD,HEATH PARK,ROMFORD,ESSEX.
TELEPHONE, HORNCHURCH 59982

LIBRARIAN

FRED RAY. 20,WINDMILL STEPS,KURSAAL WAY,SOUTHEND-ON-SEA,ESSEX.
TELEPHONE SOUTHEND 6151370

PUBLIC RELATIONS OFFICER

KELVIN HOLT. 18,STEBBINGS, LAINDON HILLS ,ESSEX.

SOCIAL SECRETARY

JILL RAY. 20,WINDMILL STEPS,KURSAAL WAY,SOUTHEHD-ON-SEA,ESSEX.
TELEPHONE: SOUTHEND 615137.

CATERING SECRETARY

AUDREY CHESWRIGHT. 2, CEDAR AVENUE, WICKFORD, ESSEX.
TELEPHONE: WICKFORD 2531

COMMITTEE MEMBER

ALAN WATKINS. 27,WINDMILL STEPS,KURSAAL WAY,SOUXHEND-ON-SEA,ESSEX,

EDITORIAL

I think everyone will agree that the Show was a great success all round. Terry in his report has, I think covered all the points and thanked everyone. With this years show over its time to start thinking about next years, a show like ours takes a long time to organise. The date is the 5th May 1984, so put it in your diaries and start thinking who's going to run it, as a new Show Secretary is needed.

This issue of the Journal has a few differences, as you may, or may not have noticed. We have done away, for this issue, with the duplicator and thus a lot of inked up pieces of paper. The use of a photocopier will allow more freedom and the inclusion of photos (Black and white.) and drawings. What I am looking for is some new cover designs as I intend to alter this with each issue. So if you feel unable to write an article why not have a go at a cover design? Articles are still urgently required particularly on the keeping and breeding of fish, I know there are lots of people out there with lots of knowledge so why not pass it on to the rest of us via the magazine.

The next leg of the quiz should be tomorrow night (Provided printing has not been told up.). This is the quarter finals and if we win this we'll be well on the way to the finals to be held at the convention later in the year. So if you're free why not come along and cheer us on?

The interclub on the 21st of June went very well and the other clubs enjoyed themselves. How often these days do you see over 80 people at a fish meeting, the norm for most clubs is around 10. We managed to win the table show and a hence of winning the coveted block and gavel. But there are two more legs to be supported before there is any chance of that. These legs are on the 21st September and another date yet to be arranged.

The cover this month shows three unusual adaptations found in fish. The Pipe-Fish is so shaped so that in its habitat of Sea grass it will be well camouflaged due to its shape. The Sea Dragon, is a relation of the seahorses, it lives amongst floating Seaweed to allow it to hide away from predators it has evolved this strange camouflage so that it looks like a piece of the seaweed. The Seahorse has developed a prehensile tail, like some monkeys, in order that it can hold onto pieces of coral or rock in its habitat, another unusual feature is that the male broods the babies in a pouch in his abdomen! All fishes however bizarre in colour or shape will, in their natural habitat blend in with the background, it is only when stuck in our aquariums that they stand out.

That's it folks, now I can start on the next one, any complaints, or praise for that matter, will be greatly appreciated as any improvement is all for the better.

Chris

P.S. Congratulations are due to Paul Boore and his wife, Penny, on the birth of their second son.

PRESIDENTS PAGE

Here we are again with another Journal. I just cannot believe that it's two months since our Open Show how time flies. Looking back at it the show was a huge success all round and everything went off as planned. Once again we had nearly 700 entries, and plenty of all round participation by members and some non-members. My sincere thanks to all those who took part and helped in any way. A special thank you must go to Terry Waller who took on the final arrangements of the Show in such unfortunate circumstances and was definitely our anchor man, thanks again Terry, just as a word of warning, and a date for your diaries next year's show has been booked for the 5th May 1984 (fifth of the fifth as Terry said). The judges have been contacted and, I believe, some have been booked. So next year's show is in its early stages of preparation, let's hope for another great success. Since our show the club had an enjoyable day out, by coach, to the Brighton show and another day is being organised on the 28th August to go to the Ashford show, then on down to Folkestone. Let's hope for another nice day.

Recently a number of us went to OSCARS for a meal and this was very enjoyable. I was greatly surprised to discover how many budding musicians the club has. Mind you I had a bit to drink by then? Later in the year, 28th October, at the Kursaal Community Centre - details of this will follow shortly. Jill and Fred, like all the other committee members, are very busy members and I would like to thank them for all their efforts much appreciated,,

The good news is that Chris Cheswright, our editor, has secured a teaching job. The bad news is that it is in Croydon. Thus Chris won't be able to be so active in the club in the near future. I know he will always keep an eye on the club and visit us during holiday times. But it looks as though there is going to be another space on the committee, that of editor, see Chris if you are interested.

Before you all sink back in your seats let me make you aware of one thing - although the club is some 50 years old there is only one long standing member - Audrey. People like Fred and Jill who only joined the club in 1982, at the show, are however doing a great job in helping to run the club. So, whether new member or old, by the A.G.M. on December 6th you might find yourself nominated for the 1984 committee. So just remember that this is your club and the more you put into it the more you'll get out. It might seem a little early in the year to say this but I hope it will put our newer members in the picture of how the club runs,

I am not left with much more to say. The club seems to be running well and I hope you are all, getting something out of it? If not, don't get upset, have a chat with me, or another committee member about it and we'll try and sort something out.

Well good luck to you all and happy fishkeeping.
Dave Burges

Dave

'LITTLE TOMS' APPEAR IN LONDON.

by P.F.CAPON.(Copyright reserved.)

In 1973 Jin Connelly of Bethaal Green A.S. came to me with a tale of a most peculiar 'livebearer' that he had seen in the tanks of an East London aquatic dealer. His description was of a small, colourless, elongated fish, the male of which carried a gonopodium which seemed out of all proportion to the body of the fish and which had curled hook-like rays at the tip. Now, only one fish, in my experience, has such a preposterous anal fin- *Tomeurus gracilis*. I first learnt of the oddity by way of an article written by the late Myron Gordon back in 1955. At the time I remember wishing to own some of these fish and promising myself that if ever I came across any I would purchase some. But as the years passed memory faded and the ambition was forgotten.

Now in October 1973 the fish appeared to be available, Within an hour we were studying them in the dealers tanks, Jim's description had been accurate as they were *Tomeurus* no other fish has a gonopodium of such distinction! The tank contained somewhat over a hundred of these fish, the label on the aquarium referred to them as 'glass characins' (but who am I to criticise the dealer, with thousands of fishes arriving every day, for not readily identifying a fish that does not appear in any of the standard references available to the aquarist (except for a photograph taken by Sam Dunton of the New York Zoological Society, which appears in the 1957 edition of the Encyclopedia of Tropical Fishes by Herbert Axelrod and the late William Vorderwinkler). Indeed, if he had been able to positively identify them maybe they would have all been sold before I even heard they were in stock.

Against the advice that I would give other aquarists I purchased 5. I say against the advice because many of the fish in the tank were in poor condition, with perhaps 10% of them suffering from swimbladder trouble and the surface littered with dead and dying fish. In addition the only other occupant of the tank was a Sting ray, which I observed to eat 3 *Tomeurus* whilst we were netting out specimens. The *Tomeurus* normally swam in the top 2" of the tank but fear of the net drove them into the lower reaches where the ray was able to trap them with its mantle against the glass..

My 5 fish, carefully selected for apparent good health, were three males and two females. They had to remain in the bag for 5 hours before reaching the warmth of my fish house and in this time the temperature had dropped to 60°F. One of the males, the largest, of course, was by then in trouble, unable to swim upright: he died within a few hours.

Tomeurus gracilis was first described by Eigenmann in 1909 and comes from Guyana and Venezuela. Originally it was placed in the sub-family Tomeurinae in the family Poeciliidae, in 1947 Myers placed it in a separate family, the Tomauridae, as the sole representative, because although it bred by internal fertilization it was not a livebearer but laid eggs. Professor G.V. Nikol'ski of the Soviet Union even went so far as to suggest it should belong to the super-family Tomeuroidae because of its uniqueness. In 1963 Rosen and Bailey returned it to the Tonurinae as the only oviparous sub-family of the Poeciliidae.

John T. Van and Clifford Pope, working in 1929 came across the fish in the tidal reaches of the Essequibo River in Guyana. They reported on it to the New York Zoological Society and of their attempts to keep it in captivity. They told of its being a surface dwelling fish which tended to.....

hide under floating materials, only to swim off at great speed if disturbed. They also wrote of finding it in pools left after flooding of the river; these pools were said to reach, temperatures considerably in excess of the main body of water. They also described the retention of eggs and well-developed embryos but were unable to find evidence of live birth. They said that "Iowa-Iowa lice" was the Creole name for the fish whilst the Europeans termed it the 'sword-finned minnow', presumably because of the gonopodium.

I can find no further reference to *Tomeurus* until 1955 when Myron Gordon wrote of his experiences with them; that is not to say that references do not exist, but as an amateur aquarist my time and literature are limited. M. Gordon's stock, which consisted of just one pair of living fish given to him by Axelrod, came from a South American shipment to World Wide Aquarium Supply Company of New York. In addition they had the foresight to freeze a number of specimens to enable them to be studied without M. Gordon having to sacrifice the living ones. Reference to the report by Van and Pope led him to set up a tank for the *Tomeurus* with aged water to which salt had been added; contrary to his normal meticulous reporting Myron Gordon tells us the depth of water, 4", and the amount of salt added to the tank, but not the volume of water in the tank. Neither is any reference made to the adult size the fish can reach, looking at my own specimens, the largest of which is 25mm., I would hazard a guess that the maximum size would be no more than 35mm.

Gordon handed his fish to Rosen due to his experience with livebearers. Rosen noted that fertilisation took place shortly after dusk, during day light the female repulsed the male's advances by constantly facing him as he circled her attempting to mate. Spermatophores were recorded attached to the female's anal although whether these were poor misses or the result of actual mating does not appear clear. I am not sure whether it is known whether internal fertilisation takes place or whether the spermatophores are simply placed as near the genital opening as possible. The eggs, according to the reports, are laid singly at the rate of one a day and attached by adhesive filaments to suitable plants. The female avoids her mate, arches her back into an S shape and deposits the egg at the chosen site. The eggs take somewhere around 4 weeks to hatch, although Gordon in his article does not actually record any hatching.

My own pairs of *Tomeurus* were kept in an 18x10x10 tank containing aged rainwater to which a teaspoon of pure salt was added. The dealer is reputed to use base exchange softened water acidified on occasion with sodium hydrogen phosphate, but whether the *Tomeurus* were in such water is not known. Knowing that they come from estuarine conditions, acid water obviously is not their ideal.

My largest specimen, the male that died, was examined under a microscope because of its small size. The fish measured 25mm from snout to caudal peduncle but only 4mm at its greatest body depth. The dorsal fin had rotted completely away but from the indentations on the back it must have been less than 4mm at its base, it is set well back and is similar in shape on the live fish to a female fighter's dorsal. The pectorals had 8 rays, and the tail 18, all of which appeared to be soft. Approximately below the trailing edge of the operculum there was a pair of fins that consisted of only one short curved spiny ray. Behind these came the characteristic gonopodium, unfortunately the curved extensions of three rays, which gives the impression of a basket, had rotted but the remaining fin measured 7mm and appeared to consist of 33 segments. Behind the gonopodium was another unpaired fin, which reminded me of a long adipose fin: it contained 12 triangular spines which had a slight curve towards the.....

tail. The operculum appeared to have an extension from the unusual curved shape, reminding me of, *Lepomis megalotis*, although I do wonder now whether I was seeing an internal structure. Live females have in place of the gonopodium a fan-shaped fin.

Now, I have carefully avoided naming the fins on the underside for if the pair of fins beneath the operculum are the ventrals then the fish has two anals, or, if they are only spines then the gonopodium is formed from one or both the ventrals and the female sports only one ventral.

The body is reminiscent of an eel in that the internal organs appear crowded close to the head. It is transparent and devoid of colour except that the sac containing the internal organs shows an iridescent blue under the right side-light conditions: under top-light it is simply a transparent fish. The swim bladder is easily seen, being approximately oval in the female; the male's is much longer and of a similar length to the gonopodium, presumably to balance the extra weight of the organ. The mouth is turned up and appears to belong to a carnivorous fish rather than a vegetarian one; it is larger than would be expected for so small a fish. They have been shown to take daphnia, artemia and some dried food.

Tomeurus gracilis poses many questions; is it a precursor of the livebearer, is it a livebearer that has gone back to egg laying, or is it as suggested unrelated to the Poeciliidae? If the latter is the case, living as it does in the wide waters of the Essequibo where shedding of eggs and milt would possibly result in only a small proportion of fertile eggs, perhaps it has evolved the gonopodium independently as a method of insuring that each and every egg is fertilised.

Whatever the relationship of this fish to the common livebearers it certainly is an odd one about which many facts are still unknown. It is a worthy addition to a collection of unusual fishes. The best common name to apply to it is, in my opinion, that which Myron Gordon coined Little Toms.

.....

GOLDFISH COUPLE BANNED FROM FLAT,

A couple have lost the chance of moving into a £112 a month flat because their goldfish would break the 'no pets' rules.

Landlord Philip Trubridge told baker Carol Hopson, 22, and her fiancée, data analyst Akbaer Ali, 25, that the fish tank might break and the water go over the carpet. Their offer to pay for any damage out of the £100 deposit was turned down. The couple are devoted to their eight goldfish are staying in a hostel at Bath.

Mr. Trubridge said "If I give way this time the next thing would be someone coming along with mice and then, maybe, a python,"

.....

Terry's been at it again;

A show sec` somewhere in the wilds of Kent is I. Muddle !!!

At a table show in London a *Cichlasoma biocellatum* was entered by Mr. A. Dempsey, the common name of this fish is a Jack Dempsey !!

-8-
SPARE PART

Fred Ray

One of the major advantages of belonging to an aquarist society must be the opportunity it provides for easy access to information on any fishy topic. There are three readily available sources of such information; the first is the twice-monthly meetings. Many of the speakers who bring their knowledge to the club have a very relaxed way of talking on a wide range of topics. This less formal approach to fishkeeping often makes the facts a lot easier to remember than reading a book.

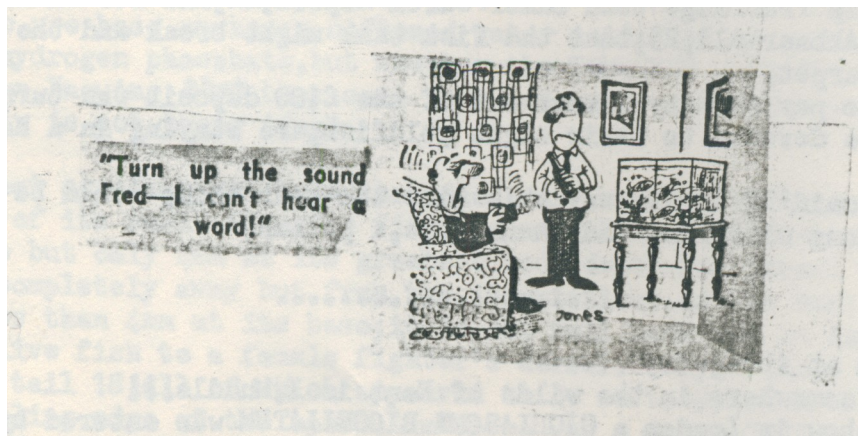
Secondly amongst the membership of S.L.A.D.A.S. there are quite a few members with many years of practical experience in all aspects of the hobby. Newcomers to the pleasures of fishkeeping, myself included have only to ask and someone can always be found who can relate their firsthand experiences, and discuss any problems you may have.

The third, and equally valuable, source of information is the club's own library. There are about 100 books available to members at present. These books may be borrowed FREE of charge from one meeting to the next. With only 100 books in the collection it is obviously not possible to cater for every specialist taste. But if a particular aspect of the hobby does appeal to you then I am sure something can be found for you.

Since I have been acting as librarian I have felt this resource has been under used. On average only 2 or 3 books are borrowed each meeting, with 50 members at each meeting it is obvious that the library is not being used to its full potential. Whether this is because members are unaware of the facility or they are too busy with their fish I don't know?!

Make use of the library at the beginning of the meeting, the interval and at the end. It seems a shame to have such a large collection of books when only a handful of members use them. So have a look now, even if it's only to stop me feeling like a SPARE PART.

P.S.ED. If there are any new books that you feel will be of interest to members let Fred know soon and the club may purchase them.

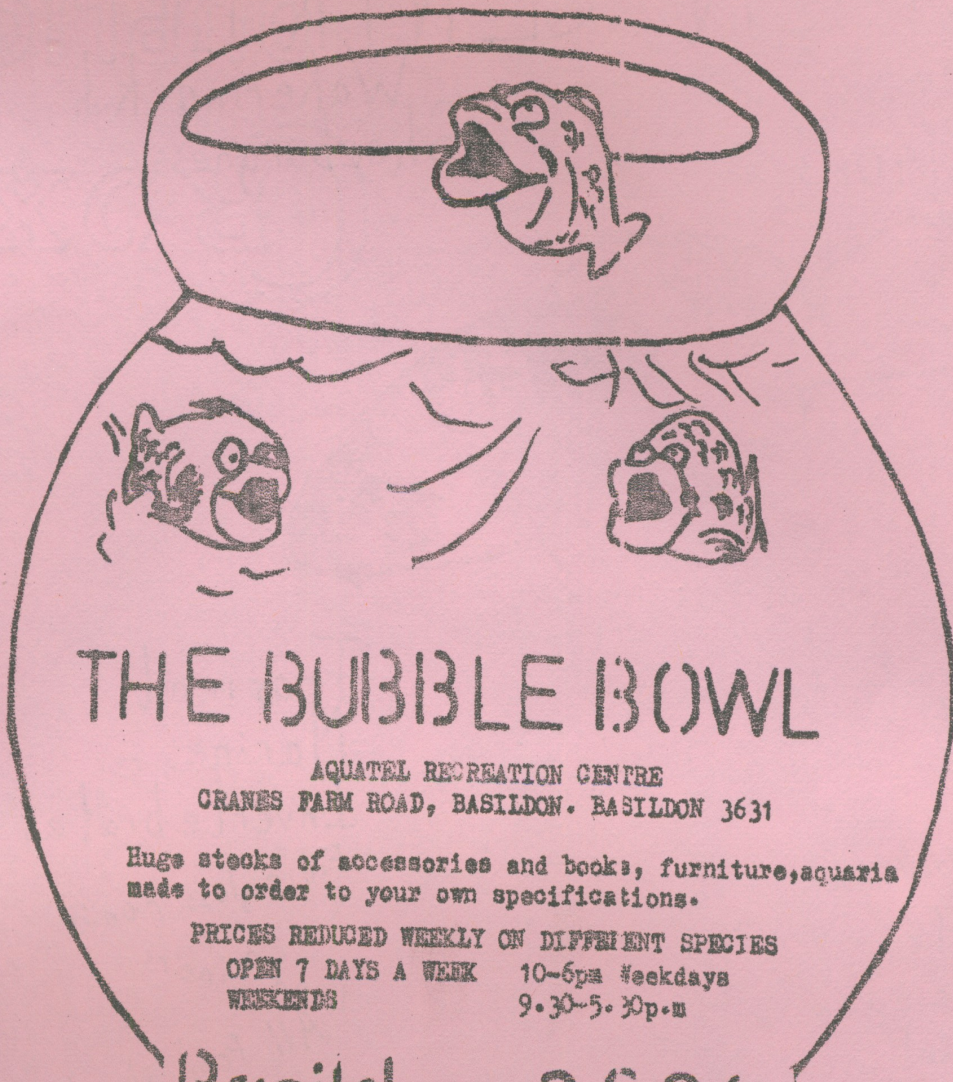


TROPICAL

MARINE

L
I
V
E

F
O
O
D



THE BUBBLE BOWL

AQUATEL RECREATION CENTRE
CRANES FARM ROAD, BASILDON. BASILDON 3631

Huge stocks of accessories and books, furniture, aquaria
made to order to your own specifications.

PRICES REDUCED WEEKLY ON DIFFERENT SPECIES

OPEN 7 DAYS A WEEK 10-6pm weekdays
WEEKENDS 9.30-5.30p.m

Basildon 3631

PLANTS

COLDWATER

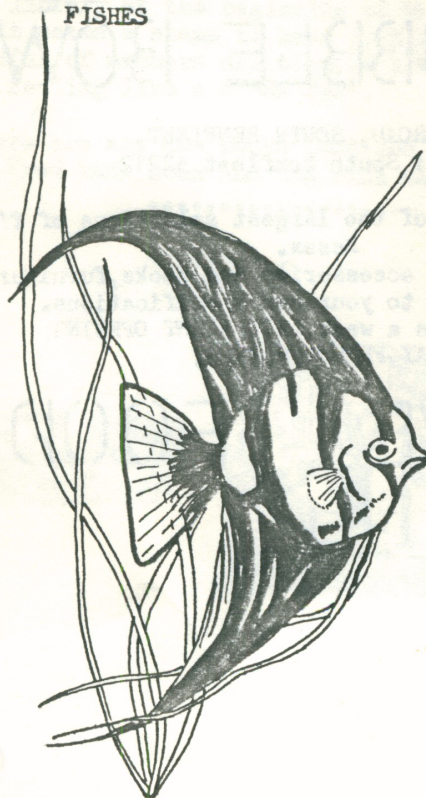
AQUATIC AND PET SHOP

81/83 SOUTHERNHAY, BASILDON.
TELEPHONE: BAS.21680

TROPICAL
AND
COLDWATER
FISHES

PLANTS,
FOOD
AND
EQUIPMENT.

ALL LIVESTOCK
FOODS AND
REQUISITES



LARGE SELECTION
OF DOMESTIC
LIVESTOCK

OPEN SHOW 1983

Well its over, no matter what your own personal opinions are, you cannot deny that our show was an overwhelming success for our club, the exhibitors and the general public. Our show IS the best show around, when me and dad are out and about we hear lots of talk about Belle Vue, Motherwell, Ally Pally etc. and our answer is come and have a look at the SLADAS show put on by a single society. I think we all had a feeling of determination to make the show a great success this year because of the great loss we suffered so close to the day. I had an inkling of the enthusiasm smouldering on the night of the show meeting when about 25 turned at Dave Burges' house, much to his delight. From the outset it was not a case of finding people for jobs but more a case of finding enough jobs for the people wanting to get involved. There I've put my finger right on it "involvement" without it we might just as well not bother because after all it. is your show and yours to enjoy on the day. What a smashing feeling it is to stand back and admire some small aspect of the show and think to yourself "I did that". Attending the door, serving the refreshments, polishing the trophies, organising raffles and money making stands were all pursued with at times quite alarming enthusiasm. For instance was there was Dave Nice standing in Leigh high street forcing O.A.P.s in the door, £68.00, I still can't beleive it, yes Dave Barron Did take draw tickets down to the Bowling Alley half way through the night when, his wife was fuming (Dave was awarded the SLADAS medal for bravery in the face of a hostile Wife for this action.) .Let us ask ourselves how my wife sold 100 of £s worth of raffle tickets including the sale of £4.00 worth to John Parrrt, A feat looked upon with utter disbeleif all over the country and just how did dad and me get the judges through that monumental task, on just ONE cup of tea each also is too incredable to even contemplate. I think that by 11.45 we had just about reached the full up stage with the entries because dad was starting to put one tank on top of another with a qu cue (sorry I cant spell the other one) behind him, 691, so near to the 700 for two years running. I can't think of another club that can get within a 100 of this. Result wise Walthamstow came out top society, what support they have given us over the years. Chris Ches. was top SLADAS member, That could not be more fitting. Dear Bill Woodward was best in show with that big eel and, overall best exhibit, the top of the tree award went to our own Doug Ridgewell for his breeders team of Gouramies, how well earnt that award was. Championship class was for class E, Gouramies and other Labyrinths and this was won by Ray Scotting of the Ashford Society. Jill Ray and Kelvin Holt and son won their first open show awards and Andrew got the first that gave him his Silver Badge for winning 45 open show firsts. It gets more like a fairy tale the longer I go on. Prizegiving makes or breaks a show, If the boys have mucked up the booking in and how easy that is with, 130 people putting in 700 entries, it is now you find out. Take a bow Chris,, Andrew and Steve for having the worst job on the day without a moan or complaint all day. Wouldn't it have been awful if we gave out the wrong trophy for the class, no chance of that happening with Will and Roy sorting them out, not content with that, they took them all home and polished them and when they had them all laid out how proud they must have felt at the sight. It was only fitting that Will should have a major part in giving out the awards (he was the only one apart from the Pres`. who had a suit.) The Mayoress entered into the spirit of the show by wanting to kiss everyone, she also expressed her amazement at the enthusiasm shown, by everyone. Did'nt dad take advantage of that kissing bit, Bill Woodward wanted to join in but had forgot how.To sum up the show I can only say that it was brilliantly organised by Dave and carried through to its completion by the ENTIRE membership of this great Society in his absence. And gentlemen abroad will think themselves acursed the were not there on Crispins day... Henry V, William Shakespear (that was put in to let you now I'm quite intellectual really.....

T. W. Waller Show Secretary (on the day)

SOME RECENT SHOWS

Chris Cheswrlight

This is just a brief report on some of the shows I, and others, have been to this year. I am glad to report that this year shows are up on numbers and the standard of fish has risen likewise. Of Southend showers so far this year include Doug Ridgewell, Kelvin Holt (and son), Jill and Fred Ray, Dave (Their friend), Will and Roy Chapman (Who show for Corringham, but wear our badge) and Andrew Waller who has to travel miles as his Dad seems to be Judging at all the local shows.

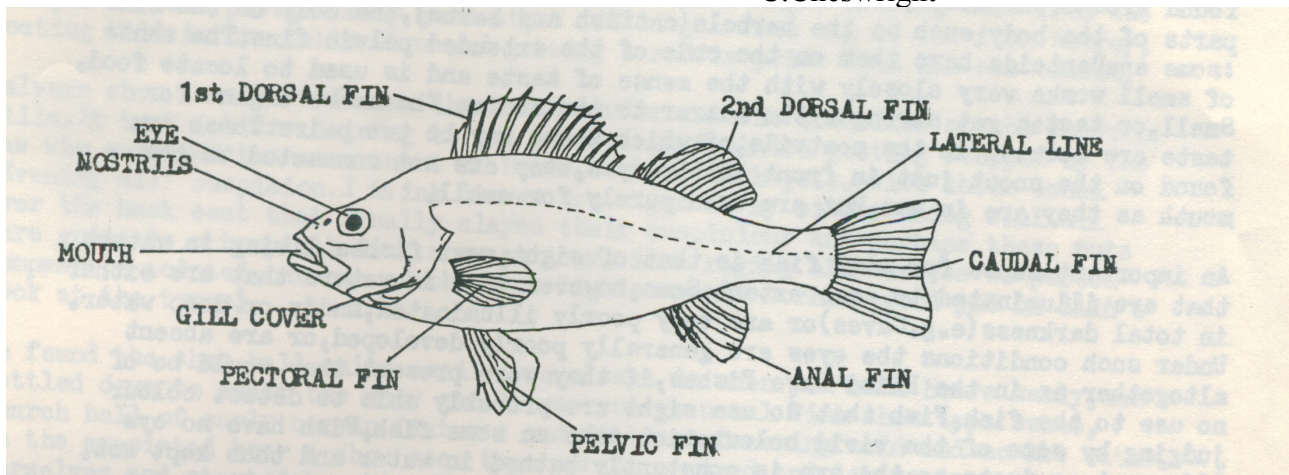
Members who show on behalf of the club are eligible to compete for the Open Show trophy for the top points. You get 4 points for a 1st, 3 for a 2nd, etc.-there are double for breeders and furnished tanks and aquascapes, there is also a point for just entering the show.

Brighton was visited by coach, after trying to drive it through a tunnel about 3 foot narrower than the coach we eventually got to the show and rapidly benched our fish before rushing off to the beach, a great day was had, except Margaret Waller who did not get her ice cold lager and had to settle for a tepid cup of tea. Terry managed to get sun burnt, he reckoned he was shaded from the wind by Janet Mackenzie? Back at the hall a number of prizes were won by Southend. The Pres' won a cake that mysteriously disappeared on the coach on the way home, how did I know, well that's another story. Dunmow was next on my list and when we got there, in Kelvins car, it was more like a Southend club meeting than a show. During judging the Waller clan went off with Bernard Meech and ended up milking goats and taking sheep for a walk. The rest of us descended on the nearest pub. After playing football with Alan, the young Holt I managed to crawl back to the hall. Southend had done very well gaining 97 pts. and winning the club championship. Jill and Fred got their first 1st and I got enough to qualify for my silver badge (45 1st's). Andrew was given a box to put his trophies in, I had to make do with two hands and a strong back. Very successful and enjoyable day out.

The following Saturday I met Doug at 7.45 am on Wickford station for the trip to the East Dulwich show. Arriving there after an easy journey at 9.30. The fish were benched quickly and we were drinking tea when The Walthamstow mob arrived with dozens of boxes of fish. Benching done and we made off for a fish shop for a look round, followed by a visit to a public house (someone was heard to say there are 2 things that go with Open Shows booze and raffles-How true.). At the show Doug had got Best Exhibit and with our 11 entries had won with 10 of them and also got, for Southend, the Highest pointed society. Our bags, even more packed than when we had arrived, full we made our weary way back to the train with Doug sure something was going to go wrong at the next show as he'd just got his 13th 1st !!

The bits and what they do.

C.Cheswright



The External Features:-

A fish's body is designed in such a way as to make it streamlined and able to cut easily through the water, much as a plane is pointed towards the front so that it offers little resistance as it passes through the air. This effect is aided by a close fitting layer of scales giving the body a very smooth surface. Over the scales is a layer of mucus producing skin, some fishes (e.g. Botias and Loaches) do not have any scales making them very slippery to handle.

One feature common to all fish is the presence of fins in one form or other, in some they are greatly reduced and very difficult to see. The fins are used to aid in locomotion and balance and in some as a means of display to a mate or enemy. The principle fin used by fish in swimming is the caudal fin (tail), which by a side to side movement caused through movements of the body's muscles propels the fish forward. In eels most of the propulsion is given by the bending of the body. A few fish propel their bodies by different means, for example the Seahorse (See cover) has developed the tail to cling to objects and movement is brought about by using the pectoral fins. The other fins are used to balance the fish and allow the fish to turn corners; by sticking out one of the pectoral fins, by sticking out both a convenient brake is produced.

The fish generally kept in aquariums are known as bony fish, they have a bone based skeleton, as compared to the sharks and rays which have one made of a softer substance called cartilage (This gives stiffness to our ears), the bony fishes in their fins contain some hard rays, these being thicker than other rays and aid in holding the fin rigid. In the above diagram hard rays are in the dorsals, pelvics and anal fin. In some fish books the following may be seen D.15-17, A.16-18, etc. These refer to the number of fin rays in each fin and are used by scientists in the identification of fish. The letters refer to the fins, thus D = dorsal, A = anal, etc, the number referring to the number of fin rays.

Other external features include the mouth, which is used to take in food and also as an entry for water in respiration, the water leaving, after passing over the gills, through the opercula (gill covers).

Food is tested through the sense of smell, the organs for which are generally found around the mouth, as in man. However they may also be located on other parts of the body such as the barbels (catfish and barbs), the body or the fins in some anabantoids have them on the ends of the extended pelvic fins. The sense of smell works very closely with the sense of taste and is used to locate food. Smell, or tastes get stronger the nearer to the source. The sense organs for taste are located in the nostrils, of which there may be two pairs. These are found on the snout just in front of the eyes, they are not connected to the mouth as they are in man but are used purely for smell.

An important sense for many fish is that of sight, most fishes living in waters that are illuminated to some extent. So, however live in waters that are either in total darkness (e.g. Caves) or are very poorly illuminated, muddy or deep water, under such conditions the eyes are generally poorly developed, or are absent altogether as in the Blind Cave Fishes, if they were present they would be of no use to the fish. Fish that do use sight are probably able to detect colour judging by some of the vivid colouration seen on some fish. Fish have no eye lids or tear ducts as the eye is constantly bathed in water and thus kept wet. The majority of fishes are unable to move their eyes, there are however exceptions to this rule and one is the *Corydoras* catfish.

Fish also have a sense of hearing, when far away from the sound source they use their ears, these are internal and do not open to the outside. When up close they use another sense organ, the lateral line. This passes along the length of the body and across the head. It consists of canals or furrows with sense organs, These pick up sound waves from around them and the fish can build up a picture of its surroundings in sound. This is a very important sense to blind cave fish as they can apparently recognise the difference between an object such as a rock and food. It is the lateral line which prevents fish from smashing into the glass of an aquarium.

Different types of fish require each sense to differing degrees, thus some have reduced vision, others acute senses of taste and smell. Pike for example have very good eye sight to locate prey, a Blind cave fish has an acute lateral line sense, catfish rely heavily on taste. All these differences adapt the fish to their own individual habitat.

One group of fish worthy of a mention here are the Mormyridae (Elephant and knife fish) which have evolved the ability to produce a weak electric field around them, this has been developed further in some fishes to actually stun other fish to eat (e.g. Electric eel). If any object distorts this field it stimulates sensors in the body which are able not only to locate the object but also to identify it. These fish have reduced eyes and are found in the murk of muddy beds and so rely on the electric sense to produce a 'picture' of where it lives.

ANOTHER NOT SO LOCAL SHOW.

A.WALLER.

Getting my Dad out of bed to go to a fish show is getting impossible, there it was 3 O'clock in the morning and he's still in bed ! I suppose when he makes the effort and gets out of bed he'll start moaning about the snow on the car. Come on get up and you'd better get Mum up as well, the batteries flat and we won't be able to posh start it on our own in all that slush. I decided we were going to Malvern some weeks ago when I caught him off guard late one night driving home from the club, he'd had a particularly good night fiddling a free cup of tea from Audrey, beating Will in the table show and getting a raffle prize with his one ticket,

Malvern show is situated near the Welsh border and the town lies on the Malvern Hills. It took 4. hours driving to get there, this included getting stopped by the law who surveyed the assortment of boxes, buckets, tanks, etc, with their usual "Evening All" suspicion. I think it was the sight of my sister being sick all over the back seat that finally allayed their suspicions and perhaps these nuts were going to a tropical fish show at 4am. in a raging blizzard. As we parted company he pointed out one of the back lights wasn't working, good job he didn't look at the tyres!

We found the show hall quite easily, you always do when you're 2 hours early, and settled down, to await the show section 1. It was your usual fish show type venue, church hall of early Norman fixtures and fittings, freezing cold and no hot water, the appointed hour a show section, type person arrived and let us in, we introduced ourselves and started benching. We had a lot of entries to bench, the only problem was the lack of hot water, they intended to boil up a kettle to supply any needed (imagine that at our show.). The cold water was supplied from one hand basin, the best method of obtaining water was to put the plug in and syphon the water into a bucket,. As more and more exhibitors arrived, and as the entries got more and more and judging got nearer this arrangement got less and less efficient.

After about 2 hours of benching we began to wonder if we had the right day as we were the only people there.. We tentatively approached the show section. who seemed totally oblivious of the fact that with only an hour to go to judging there were only 30 entries, all ours Not to worry, she said, we only ever get 180, was she in for a surprise. In the last hour another 420 entries arrived much to her consternation and even more so to the TWO judges. They put them on tables, under tables, on the stage, on the floor, on top of each other, The refreshments sold out in under an hour and with an emergency committee meeting decided to purchase another book of raffle tickets, Fortunately they were able to rope in my Dad and Bob Esson to help judge. I had a lot of success getting six firsts and loads of places.

The journey home was quite uneventful, apart from the puncture we got a mile from the show hall and had to unload the car of all the gear we'd put in ten minutes before, it had been that sort of day.

Bet you didn't know the Head fisherman at Brixham harbour is Mr, Trout.

In 1972 a certain Mrs Briggs was thanked by the Harrowgate club for her services to the membership?

When the folks left the tap on and went on holiday George the goldfish had a splashing time. George the goldfish had the holiday of a lifetime when a family went away for a long weekend. He was left behind in a shallow bath which became bigger and bigger, until finally he was just a small fish in a monumental pool.

George's glorious adventure was brought about by the devotion of his schoolboy owner, who switched him from his bowl to the bath before going away with his parents. To make extra sure his pet had a special treat, ten year old Chris Durose left the cold tap trickling to aerate the water. Unfortunately the bath overflow was blocked, water lapped over the edge, covered the bathroom, seeped into the floor, cascaded through the ceiling below and flooded the kitchen.

Neighbours went in to find hundreds of pounds of damage..... George contentedly swimming around in the swollen bath

This must be even worse than a single burst tank-and that's bad enough! !

DATES TO REMEMBER?

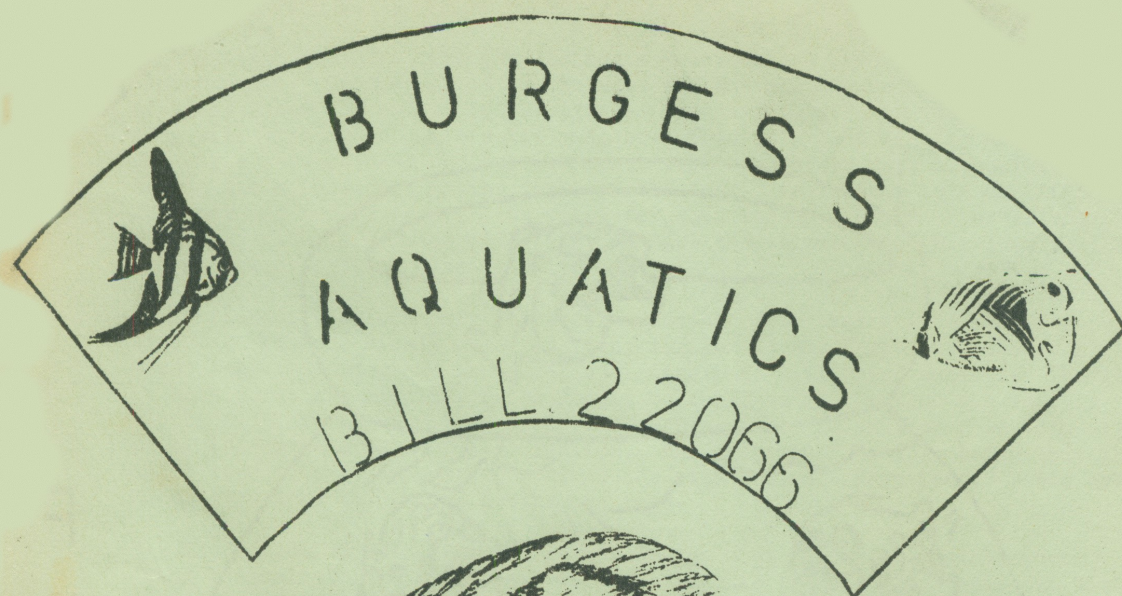
20th July Quiz Newham v. Super S.L.A.D.A.S.
28th August Coach trip to Ashford show

Where Have All The Furnished Aquaria Gone?

T Waller

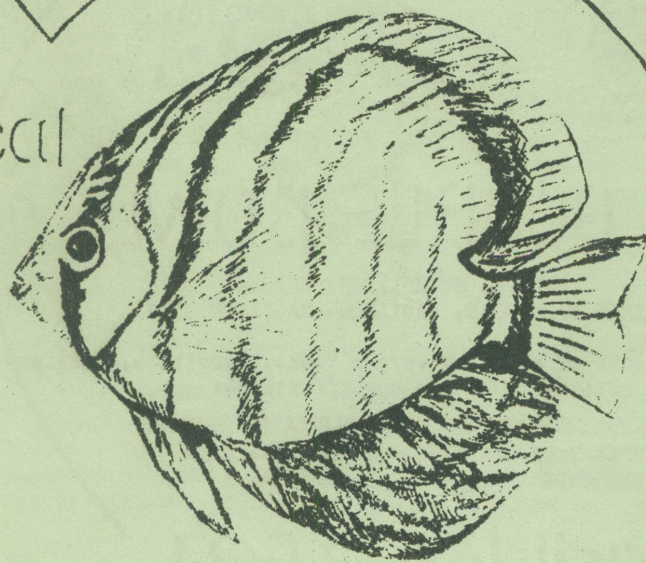
Through the course of my work with the Federation I have been giving a lot of thought to the disappearance of the furnished tank at shows with a view to encouraging them back. The age old theory is cast. I was sure it was this myself, but is it? In the 1950's shows would boast a dozen big aquaria and Hendon actually put on a show just for them getting hundreds of entries! What a different story these days with most clubs not even putting the class into their schedules, and those that do getting 6 entries at the most. Cost you may say but it's always been with us. In the 1950's the hey day of furnished tanks wages were between £8 & £12, thus with all the bills paid there was not a lot left. Now each family is taking home between £80-£100, an 8 fold increase on the 1950's figure.

The Aquarist magazine, March 1952 advertised:- Vallis @ 30p per 12, Ludwigia @ 30p per 12, Cabomba @ 50p per 12, Cardamine @ 40p per 12 a total of 48 plants costing £1.50, enough to do a furnished tank justice. In Andrew's place of work the same now costs approximately £3.60, just over twice as much as the 1950's but wages have rocketed at least 8x? So if people by the score were able to put on huge displays of furnished aquaria in the 1950's why can't we do it now? Is it because they were aquarists capable of growing their own plants? Could it be that moral values required more than buying a fish to win a trophy, could it be they really were in it for the fun? WHY NOT HAVE A GO YOU NEVER KNOW YOUR LUCK.



Tropical

Marine



Coldwater

727 Rcyleigh Rd, Hutton.

Southend, Leigh
and District



Aquarist Society

SOUTHEND, LEIGH AND DISTRICT AQUARIST SOCIETY

(founded 1935 or before.)

Affiliated F.B.A.J. & A.E.E.L. A.S.

Meeting sare held on the 1st and 3rd Tuesday of every month, the meeting commences at 8.30 p.m.

St ANDREWS HALL
ELECTRIC AVENUE
WESTCLIFF-ON-SEA
ESSEX
(entrance in Southview Drive)

BI-MONTHLY JOURNAL

No 95

December 1983

CONTENTS

OFFICERS FOR 1983	2
EDITORIAL	3
PRESIDENTS PAGE	4
BIOLOGICAL FILTRATION by Barry Myers ...	5
S.L.A.D.A.S. TABLE SHOW RESULTS.....	6
A BARB GALLED ROSY by Terry Waller	8
TABLE SHOW TROPHY .WINNERS	11
COMMITTEE JOBS by Terry Waller ,.....	12
MY TANK IN THE GARDEN by Kelvin Holt .	14
"SOMETHING TO DO IN BED" by Terry Waller	14
"WHAT ARE FRIENDS FOR !!" by Fred Ray ,	15
STOP PRESS !	15

COPYRIGHT - Any original material appearing in this journal may be reprinted provided permission has been sought from the editor and full mention is made of S.L.A.D.A.S. and the author.

PRESIDENT

DAVE BURGESS. 11, SILVERDALE AVENUE, WESTCLIFF-ON-SEA, ESSEX.
TELEPHONE: SOUTHEND 337196.

VICE PRESIDENT

TONI COOPER. 98, ANSON CHASE, SHOEBOURNE, ESSEX.
TELEPHONE SHOEBOURNE 2743

SECRETARY

TERRY WALTER, 32, HAMILTON ROAD, HEATH PARK, ROMFORD, ESSEX.
TELEPHONE I HORNCHURCH 59982.

TREASURER

DAVE BARON.. 17, BELGRAVE CLOSE, EASTWOOD, ESSEX.
TELEPHONE SOUTHEND 527307.

EDITOR

CHRIS CHESWRIGHT, 2, CEDAR AVENUE, WICKFORD, ESSEX.
TELEPHONE WICKFORD 2531.

ASSISTANT EDITOR

KEVIN BROWSE. 6, SEVEN ACRES, WICKFORD, ESSEX.
TELEPHONE: WICKFORD 87640

TABLE SHOW SECRETARY

ANDREW WALLER. 32, HAMILTON ROAD, HEATH PARK, ROMFORD, ESSEX.
TELEPHONE, HORNCHURCH 59982

LIBRARIAN

FRED RAY. 20, WINDMILL STEPS, KURSAAL WAY, SOUTHEND-ON-SEA, ESSEX.
TELEPHONE SOUTHEND 6151370

PUBLIC RELATIONS OFFICER

KELVIN HOLT. 18, STEBBINGS, LAINDON HILLS, ESSEX.

SOCIAL SECRETARY

JILL RAY. 20, WINDMILL STEPS, KURSAAL WAY, SOUTHEND-ON-SEA, ESSEX.
TELEPHONE: SOUTHEND 615137.

CATERING SECRETARY

AUDREY CHESWRIGHT. 2, CEDAR AVENUE, WICKFORD, ESSEX.
TELEPHONE: WICKFORD 2531

COMMITTEE MEMBER

ALAN WATKINS. 27, WINDMILL STEPS, KURSAAL WAY, SOUTHEND-ON-SEA, ESSEX,

EDITORIAL

Here we go with my first Journal, and firstly I would like to thank Chris Cheswright for the excellent job he has done for the last year before taking a teaching position in Croydon. Many thanks also must go to the old committee, and the new committee will welcome suggestions for the coming year. So please come forward and tell us what you would like to do, see, or hear about.

Articles are needed for the forth coming Journal so any ideas on anything fishy or of general interest to the club please come and see me, we cannot expect Terry Waller and Chris Cheswright to supply :all the material used.

On November 6th the Essex Convention was held in Rush Green. The cost was £1 and for that there was;

- 1 A talk by Andrew Stagg from New Technology on setting up a Marine Filter System.
- 2 The final of the Essex Quiz
- 3 A talk by Dave Sandford on Tropical Catfish.

The talk by Andrew Stagg was very interesting but did get rather technical at times. He recommended an under gravel system backed up with an external filter. Using an American slide show it explained depth of coral sand to use and the time taken for the aquarium to mature, itself ..going through the ammonia level, nitrite level and finally nitrate level. It explains the constant need for water changes to remove the final nitrate level to keep it down to a level the fish can tolerate, this also applies to freshwater tropical fish.

Secondly, came the final of the Essex Quiz for the Dave Cheswright Memorial Trophy. Taking part were Harlow, East-London and Southend, our team consisting of Terry Waller (captain), Andrew Waller and Chris Cheswright after tossing up to decide which set of questions each team would answer, The quiz started.

East London got off to great start getting their easier questions first, Harlow also started well and we fell behind by a few points. By the half way stage the lead had changed with Harlow first, East London second and Southend trailing. Things then seemed to get even worse with us falling 8 points behind at one stage. However the other teams started to get their harder questions and we started to get our easier questions. We gradually pulled up, the points being given as 36 points East London, 36 points Harlow, and 35 points to Southend.

Now the final few questions were being asked the other teams started to get a mental block, we edged into the lead, could we stay there.? A few more questions and the quiz was over Southend had won by 5 points. Congratulations must go to the team after at one stage being so far behind.

Audrey Cheswright presented the Trophy to her son Chris which seemed very fitting as Dave Cheswright had been a Southend member for many many years.

PRESIDENTS PAGE

Once again we find ourselves at the end of another club year. With the Annual General Meeting approaching us, and a new committee to elect.

The year once again passed very quickly. This must be due to the very active and successful club ours has become.

I feel alot of this success has come about thanks to the very enthusiastic and hard working committee we have had. Committee meetings have gone very smoothly and plenty of thought has gone into arranging club events. I will take this opportunity to thank all the 1982-83 committee for the effort and indulgence that has gone into the smooth running of our club.

Also I can report the financial side of our club is sound and no increase in subs` is considered necessary.

Some of the events that spring to mind were, two coach outings, Halstead Barbecue, Evening meal out, Disco dance, conventions, Open Show etc.,

Only one sad and upsetting thing has happened and that was the. sudden death of Dave Cheswright. A lot of us still miss him, and he is often spoken of and referred to at meetings etc.,

Now there is a Memorial Trophy in his honour he will be remembered for many years to come.

Our thanks must go to our quiz team, Messrs., T and A Waller and Chris Cheswright who worked so hard to win the trophy for our club in its first year.

Now the last things I have to say for this year are that I hope next years committee will be as good as this years and wish all members a very enjoyable festive season and a Happy New Year. With plenty of active fish keeping next year.

DAVE BURGESS

BIOLOGICAL FILTRATION

by Barry Myer:, Walthamstow A.S.

Fish excrete more waste in an aquarium than they do in the wild, due to peculiarities in their metabolism, and with reduced energy requirements, they are generally overfed.

In addition to these un-natural waste compounds, they also excrete several other metabolic compounds. In decreasing order of importance fish excrete ammonia, trimethylamineoxide, urea, uric acid, amino acids, creatine, and a few other nitrogenous organic compounds.

These compounds must be broken down by bacterial decomposition if the water is to remain healthy. This is done primarily by three species of bacteria (*Bacterium coli*, *B.proteus* and *B.subtilis*).

By secreting enzymes outside their cells, they break down proteins, first into peptides and then into amino acids, the 'building blocks' of protein molecules. This process in itself can cause problems, as a by-product of their own metabolism, these bacteria secrete bacterial toxins, which are toxic to fish and invertebrates even in relatively small quantities.

Normally this is not a problem, since it is quite rare for excessive amounts of proteins to become available to the bacteria. The danger exists when a larger animal dies and begins to decompose, or when much too much food is given. Under these circumstances, so much toxin may be produced within a small period, it may kill the aquarium inhabitants.

Fortunately, these three species of bacteria are not found in filter systems, because the conditions are unfavourable, but they do exist in the aquarium itself, being on stones, wood, coral, the glass sides, and on the mucoid skin of the fish. To prevent toxic effects from these bacteria, all dead and decaying matter must be removed immediately.

Amino acids, which are produced (via a peptide stage) in the first phase of protein decomposition, and which are passed out by the animals (especially echinoderms and crustaceans in marine aquaria) can be divided into few main groups.

- (1) Aliphatic Group - a group without hetero-atoms, which are not important, because they are non-toxic and no effect on water.
- (2) Sulphurous Group - if present in relatively large amounts, they can lower the ratio of reducing compounds to oxidizing compounds in the water, (Redox potential). When the water is not adequately saturated with oxygen, certain bacteria produce hydrogen sulphide, which is very toxic and can react with iron to form ferric sulphide. This is shown by the substrate turning black and it will smell of hydrogen sulphide (bad eggs).
- (3)- Cyclic or Aromatic Group - have slightly reductive properties, but are easily oxidized by bacteria into phenols and cresols. Phenols are toxic even in small quantities but are easily oxidized into dyes. Dyes cannot be broken down, but accumulate, and cause the yellow, or yellowish-brown water.

Amino acids are broken down into amines, many of which are volatile, and escape into the atmosphere. If amines are present in large quantities, the water will smell of over-ripe fruit or onions. In this case, the process of decomposition of organic matter is not proceeding properly. This is caused by one of two reasons, either the bacteria which further decompose the amines have died, normally due to antibiotic drugs, or simply because there is not enough bacteria to cope with the organic matter, e.g. dead fish or overcrowding.

Cont.....

SOUTHEND, LEIGH AND DISTRICT AQUARIST SOCIETY

AN explanation of and rules of Table Shows and Competitions which are peculiar to o.L.A.D.A.S.
Please note: Whilst no Federation ruling is in force to govern competitions of this kind, judging will be to current F.B.A.S. rules and standards as apply to all shows ,,

MEMBERS CHALLENGE COMPETITION

- 1) The M.C.G. consists of four rounds.
- 2) Each member may enter one or two fish which must not be of like species unless readily sexable as male and female,,
- 3) Those fish entered must be shown at each of the four rounds. The fish will be preferably judged by the same judge on each occasion.
- 4) No results will be announced until after the final round.
- 6) Senior and junior exhibitors enter different competitions.
- 7) The entrance fee is payable at the start of the first round.
- 8) An annual trophy is awarded to the junior and senior winner0

The purpose of the competition is to test the aquarist's skill in fishkeeping by judging the progress of the entry over a period of time.

MEMBERS BEST FISH

- 1) Senior and junior exhibitors enter separate competitions. '
- 2) Annual trophies are awarded to the winner of each class.
- 3) One fish only per member considered to be their best fish.
- 4) Any fish is eligible for entry. .

HARD LUCK TABLE SHOW

- 1) Open to any member who has not won a first award at a S.L.A.D.A.S., or inter-club table show in the preceding year, excepting plant classes.
- 2) Any fish may be entered, (Tropical and Coldwater).
- 3) Only one fish per member, Senior and Junior classes.
- 4) Annual trophies awarded for both classes

MINI TANK TABLE SHOW

- 1) All entries must be entered in a tank from 4"x4"x6"long to a 5"x5"x7"long tanks.
- 2) At least 2 fish must occupy the tank.
- 3) No limit on entries, no artificial lights permitted.
- 4) Points to be counted yearly.
- 5) Mini.tanks are furnished as to a furnished aquarium.

FRY REARING COMPETITION

- 1). A recorded number of fry are allocated at a nominal fee.
- 2). These fry are cared for by the member for a specified time period
- 3). When the period has elapsed 50% of the fry are returned for judging..
- 4) The fish will be judged separately, and the points added together
- 5). The fish remain the property of the exhibitor.
- 6). No trophies or medals are awarded. A prize is awarded to the winner.

The purpose of this competition is to test the aquarists skill.'in growing fish from fry to exhibition standard.

POND COMPETITION judged to F.B.A.S. standards.

HOME FURNISHED AQUARIUM this is judged in your home twice at an interval of about 3 months. The purpose is to check the aquarist' skill in maintaining the plants, fishes and water in good condition

An annual trophy is awarded for both the last two competitions.

cont.. .

MERITORIOUS BREEDING

A trophy is awarded to a member breeding a species considered of merit by the committee. A Member considering that he or she has bred a species eligible for this Trophy must notify the Table Show Secretary of the date of birth and the species as soon as possible after being bred.

=====

cont..... page 5

BIOLOGICAL FILTRATION

by Barry Myers

There is one group of amines which are toxic, which in large quantities may poison the fishes blood. This is not normally a problem, because the quantities produced are normally broken down into organic acids and ammonia. If organic acids are in large quantities, they can cause a pH drop, but normally bacteria quickly break the organic acids into carbon dioxide and water. Ammonia is the first inorganic compound of bacterial decomposition (nitrification), which is oxidized by nitrosomonas bacteria into nitrates. Nitrates mark the end of bacterial decomposition of nitrogenous organic compounds.

This process is only successful if there is sufficient oxygen available, because all these bacteria are aerobic (oxygen breathing).

=====

Did you know ? Terry Waller won 1st, 2nd, 3rd and 4th in an Open Show Plant Class, and then left them behind at the show. ...

=====

cont...**Editorial from page 3**

Finally Dave Sandford gave a talk on Catfish in general. He used two projectors at the same time giving us two different pictures side by side. The photographs were brilliant. He explained the reason for a catfish's shape due to the conditions it was living in. Also he said as a general rule the larger the barbels the less suitable the fish was for a community tank. A very enjoyable talk.

A raffle was organised by Corringham and Terry Waller won again.

The afternoon finished about 7 p.m, and for 5 hours entertainment and refreshments £1.50; was a small price to pay. Over 100 people attended and a very enjoyable afternoon was had by ALL.

Well ! I hope you all enjoy the Wine and Cheese Evening and have a Very Merry Christmas and a Happy New Year.

KELVIN HOLT

A BARB CALLED ROSY.

Barbus conchoni is one of those fishes that has been around for so long it has reached the stage of being more or less ignored when encountered in shops, auctions or shows. How fickle the aquarist is !

The Rosy Barb as it is known is one of the hobbies real gems, it is mild mannered, extremely colourful and easy, and very easy to breed and raise. The fish comes from North India and grows to about 5" in the wild but about 2½" in the aquarium. Males are a beautiful rosy red with a shiny silver-gold band across the top of the body, it has a very attractive dense black flash in the dorsal, what a beauty. The female is less colourful being a gold colour with colourless fins and is also bigger and more robust in the body. So here we have a fish that is peaceful, colourful, easy to sex and breed, eats anything and is quite happy in temperature ranges between 68 and 78°F. So why is it snubbed? Can it be that the fish has committed the cardinal sin of being around too long, has it joined the ranks of the Zebra, White Cloud, or Black Widow etc. whose main claim to the unpopular ranks is the fact that they have just been around too long and as we are always looking for newer species to stimulate our interest we forget just how beautiful some of these less popular species are.

This was the first egglayer I ever bred, it was not by accident it was a planned spawning of a pair of nice fish that had been given to me by some friends of mine at the East London club.

The fishes requirements for this exercise are as follows, one pair of fish, separated and well fed on live food for a fortnight, an 18x10x10 tank or a size near to it. This we fill with water to a depth of about 8", bring up to a temperature of about 75 and put in an airstone. The only other thing is a thick white mop made from ordinary knitting wool, this should be boiled or it will float when you put it into the tank. The female should be introduced one afternoon and the male later in the evening, previous to this the mop would have been dangled down in one corner till it touches the bottom. Sexual activity starts almost at once with the male displaying and colouring up considerably. Put the light out and leave them to it. Next morning take out the mop and carefully look amongst the strands for eggs, if there are none put the mop back and examine again later. If you do see eggs put the mop back and remove the parents. NEVER try and remove the eggs or put the mop into another tank. In about 48 hours the eggs will hatch and if you look very closely you will see the babies hanging on like little slivers of glass to the wool fibre and sides of the tank. DO NOT FEED at this stage or you will pollute the tank and kill the fry. Wait a couple of days until you observe the babies darting about. First food can be brine shrimp ideally but for convenience you can feed Liquifry, following the makers instructions. As they begin to grow you can start to feed Micro Worm or crushed up flake food. After a few weeks you can pick out about a dozen or so that seem to be making the best progress and concentrate on these. You will find they grow very fast and are extremely attractive when young.

TERRY WALLER

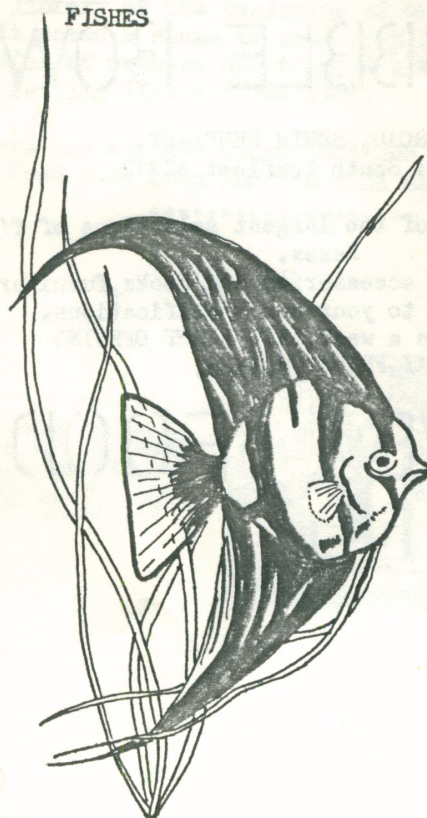
AQUATIC AND PET SHOP

81/83 SOUTHERNHAY, BASILDON.
TELEPHONE: BAS.21680

TROPICAL
AND
COLDWATER
FISHES

PLANTS,
FOOD
AND
EQUIPMENT.

ALL LIVESTOCK
FOODS AND
REQUISITES



LARGE SELECTION
OF DOMESTIC
LIVESTOCK

SWALLOW AQUATIC
CENTRE
AND NURSERIES.
LONDON RD. RAYLEIGH.

TROPICAL - Koi - COLDWATER - MARINE

PONDS - FOOD - ACCESSORIES - PLANTS

OPEN 7 DAYS A WEEK

9 A.M. TILL 6 P.M.

PHONE

RAYLEIGH. — 781265.

TABLE SHOW TROPHY WINNERS

<u>TROPHY</u>	<u>CLASS</u>	<u>JNR/SNR</u>	<u>WINNER</u>
DUBOISSON CUP	BEST CHARACIN	BEST	W. CHAPMAN
LEN WILLIS CUP	BEST KILLIFISH	BEST	C. CHESWRIGHT
STAN HYDE CUP	BEST CORYDORAS OR BROCHIS	BEST	A. WALLER
SLADAS 4	BEST COLDWATER	BEST	C. CHESWRIGHT
SAUNDERS CUP	BEST COLDWATER RUNNER-UP	2ND	T. WALLER
HARRISON TROPHY	BEST BREEDERS EGGLAYER	BEST	F. RAY
K. TURNER TROPHY	BEST BREEDERS LIVEBEARERS	BEST	A. WALLER
SLADAS 1	BEST A.O.S. EGGLAYER	JNR.	T. GILBEY
SLADAS 2	BEST PLANT	JNR.	C. HUGHES
HOME FURNISHED CUP	HOME FURNISHED	BEST	K. HOLT
POND TROPHY	POND COMPETITION	BEST	R. DAVIES
MEMBERS CHALLENGE	MEMBERS CHALLENGE	SNR.	L. SOMNER
ED NICHOLL CUP	MEMBERS CHALLENGE	JNR.	D. EKE
STAN HALSEY ROSE BOWL	HIGHEST POINTS IN TABLE SHOW	BEST	D. EKE
SOUTHCHURD TROPHY	HIGHEST POINTS IN TABLE SHOW RUNNER-UP	2ND	T. WALLER
ABBOT CUP	HIGHEST POINTS IN TABLE SHOW JNR.	JNR.	D. EKE
BROOKS SHIELD 1	BEST MINI TANK	BEST	L. SOMNER
BROOKS SHIELD 2	BEST MINI TANK RUNNER-UP	2ND	T. WALLER
SLADAS 3	POINTS IN OPEN SHOW	BEST	A. WALLER
JONES CUP 1	MEMBERS BEST FISH	SNR.	G. RAY
SLADAS 6	MEMBERS BEST FISH	JNR.	D. EKE
* MERITORIOUS BREEDING SHIELD	OUTSTANDING BREEDING	BEST	D. RIDGEWELL
PAUL BOORE TROPHY	HIGHEST TABLE SHOW POINTS SNR.	SNR.	T. WALLER
DAVE CHESWRIGHT MEMORIAL TROPHY	HIGHEST POINTED SINGLE EXHIBIT IN OPEN SHOW	BEST	S. BOORE

* MERITORIOUS BREEDING SHIELD ONLY GIVEN OUT IF THE COMMITTEE
THINK ANYONE HAS BRED ANY FISH WHICH THEY THINK DESERVES THE
TROPHY.

MERITORIOUS BREEDING SHIELD ONLY GIVEN OUT IF THE COMMITTEE THINK
ANYONE HAS BRED ANY FISH WHICH THEY THINK DESERVES THE TROPHY.

***** CONGRATULATIONS *****

These go to all Table Show Winners over the last 12 months, especially to David Eke. (Junior Member), Will Chapman and Les Somner (Senior Members) on achieving 12 Table Show 1st places and collecting their shields.

*****^*****

Many thanks to all members who competed in Table Shows over the last 12 months, the standard was good so don't get disheartened keep on trying.

Thanks also to Andrew Waller for organising Table Show judges over the past year.

COMMITTEE JOBS AND ACTIVITIES

The following is intended for those newer members or members that fancy taking on the responsibility of accepting a post on the committee. The following requirements are intended as a guide, they are not totally necessary.

President This post is greatly sought after as it has been noticed by the more observant of us that quite a good percentage of raffle prizes seem to find their way to the President. The ability of slight of hand (when drawing raffle tickets), a loud voice and ownership of a lorry or van are a distinct advantage.

Vice President With such an erotic title this post turns out to be rather disappointing, over the years nearly all the Vice Presidents have been disappointed with the actual amount of vice attached to the job.

Secretary One of the less involved jobs on the committee, all the job involves is getting judges and speakers to turn out on wet nights and drive 60 miles or so to the club. Providing an evening that suits everybody, attendance at all Area Meetings, organising Inter Clubs, Fry Rearing, Table Shows, participation in all these events is looked upon as necessary and expected. In light of there being so little to do, the Secretary often finds himself fortunate enough to be allowed to organise and stage the Open Show. Basic requirements are the ability to write illegibly, forget meeting nights and live at least 30 miles away from the club and committee meetings.

Treasurer Strictly a post for the person with the right attitude, the ability to get the maximum amount of money for a minimum of return is looked upon as necessary. Holidays abroad, new cars and change of houses seem to go hand in glove with this post. A sense of humour when confronted with bills or presentation of balance sheets and the ability to count and add up in units over ten. Always try and look flustered at meetings and arrive at committee meetings just when they are ending the basic essentials.

Editor You have the power of the press at your fingertips, such subversive literature as Raffle Results or provocative topics like Table Show Results roll off your mighty printing press to satisfy the literary appetite of your readers. You will during the course of the year be inundated with articles for publication from all literary walks of life. Articles that range from the sublime to the inane. Special requirements are to be particularly poor with spelling and possess a typewriter that works intermittently. Finger disease has to be accepted, as the year progresses and- magazine issues multiply so it will be noticed that one's first finger gets shorter and shorter.

Assistant Editor A strange post that seems to be basically turning a handle or pushing a button, stapling the magazine with articles that come to sudden ends and pages back to front and upside down. The ability to consume vast amounts of food at committee meetings is looked on as necessary. It is also an advantage to be able to lose all important documents, you can work in conjunction with the Show Secretary in this respect.

... c on t.

Table Show Secretary Not to be confused wifchi Open Show Secretary which is a much easier job. Works in conjunction with Assistant Editor in losing relevant documents before publication and with General Secretary to effectively arrange a different table show to that .one advertised on the fixture card. Must possess the ability to organise hundreds of entries in a matter of minutes, good knowledge of Latin and the ability to pacify irrate entrants that have not won. Must carry a supply of spare tanks up to 48x15x1,) top glasses and gallons of aged water. Must be able to instruct judges in the art of finding the 1st ,2nd 3rd and 4th .

Librarian Must possess a detailed knowledge of every book in the library. The art of guiding a ¼ ton box on wheels one way while it insists on going another way is usually mastered round about the . next AGM by which time you have had enough. Detailed knowledge of all roads and side streets in Southend, Leigh, Basildon, Wickford etc., is an absolute necessity for getting library books returned when the borrower has finished looking at the pictures. At one time system of fines was introduced but after several assaults on the librarian, this practise was dropped.

Catering Secretary The ability to concoct a strange brownish fluid of varying consistency which is served up in a receptacle carefully designed to slowly melt and be almost impossible to hold without ending up with 3rd degree burns. This fluid is accompanied by some softish, flat, reputable to be edible items, laughably referred to as biscuits. With this post goes the added advantage of missing all the meetings. Must be able to accept all forms of constructive criticism as to what to do with the beverage.

Social Secretary Provides all the Social Functions to be enjoyed by the membership. The ability to sell tickets for dances to people who cannot go is deemed absolutely necessary. At Social Functions this officer must always appear smiling and happy, putting a brave face on in spite of only half the people turning up. Always try to arrange a day out when you know it is going to rain, and try to book dances when there are football matches on T.V. Must be able to find show venues in the back of beyond without any trouble at all and should be well versed in coach repairs.

P.R.O. This stands for Public Relations Officer, try to avoid all contact with the membership. Development of such grammer as "ay" "wot", "dunno mate" is a great help when encouraging new members. With this job goes the use of the club trunk, this is looked upon as one of the top perks and is much sought after by other committee members. Must be able to unwind and tangle up the 2 miles of air line held in stock at least once a meeting. Sell out of all date booklets and the baggihg up of various foods in bags that are guaranteed to burst the moment you leave the hall, is also an advantage.

Committee Member This post was devised so the holder did as little as possible to help the other members of the committee. The selling of items on the stage for prices other than is marked on the bag (usually lower) is necessary. Each year there are great plans talked about for this post but so far all the holders of this post have avoid them. The sale of raffle tickets is essential, but not easy considering some of the prizes on offer (holder of this post usually has a special arrangement with the President).

TERRY WALLER

MY TANK IN THE GARDEN

At the meeting on June 7th, Phil Mills of Walthamstow Club gave a talk plants and was also selling some here had brought with him from Wildwoods In Enfield. I had an old 4ft. tank in the garden and decided to see if some tropical plants would grow outside during the summer. The tank was set up with 3 inches of soil from the garden and an inch layer of sand on top of that, into that water was added to a depth of about 4 inches, on the top of the tank was placed a sheet of perspex.

I purchased some Twist Vallisneria, a few assorted Cryptocorynes (with not a lot of root;) and Ludwigia. Also, later on some Elodea Densa out of a friend's pond, and some water lettuce (*Pistia stratiotes*). These plants all seemed to grow well two of the crypts flowered, the Elodea grew to about 2½ ft. long and flowered for weeks on end, the Ludwigia grew well but did not take well to being moved into my indoor tank at the end of September. The water lettuce grew to such a size I could not believe it, the plant produce young plantlets freely most of which I cut off the parent plant and gave away to friends and my son's school. I decided to keep some and show them at Open Shows, but they grew so large with so many young plantlets attached to them they were difficult to move, it was not uncommon for a single plant to consist of the parent and up to ten plantlets up to 18 inches across with roots up to 15 inches long.

When the tank was topped up with water a weak solution of phostrogen was also added this didn't do any harm to the White Clouds that were in the tank but did kill off a bloom of daphnia they were feeding on.

Tank air temperature varied from 50°F at night to over 110°F during the day when the tank was in full sunlight.

Well the tank stands empty at the moment but I shall see what I can grow next year.

KELVIN HOLT

=====

SOMETHING TO DO IN BED

Now the dark cold nights are upon us isn't it nice to get the old bed warmer going (my wife goes up before me) and snuggle down between the sheets with a cup of cocoa, packet of biscuits and a good book. What could be more informative than Wilkins book "Genetic Interpretation of Regressive Evolutionary Processes". Even more readable is "Osteology and Relationship of the Prochilodontidae" by T. R. Roberts. But have you read the new W. A. Bussan book on "*Pterobrycon mynae*" a remarkable new glandulocaudine fish, whatever happened to all those glandulocaudine fishes? On second thoughts I think I will stick to my who done it !!

TERRY WALLER

WHAT ARE FRIENDS FOR

q

by Fred Ray

Even those members of the club that don't know how well the much travelled Waller (Terry and Andrews) do with their fish at Open Shows along the length and breadth of the country, know from their frequent trips to the front of the hall to shake hands with Dave, that they are very keen on showing their fish. Their living room is almost devoid of any ornaments, there isn't room for them. Every available surface has been pressed into service to hold their numerous trophies, from clubs far too many to list here.

Not satisfied with his own success, Terry has recently taken to winning trophies for other people. When he heard that I had some Siamese Fighting Fish that I had bred, he tried to talk me into taking them up to the East London Breeders Show in October.

Unfortunately I had to go to work on that day, so I couldn't go. Without hesitation, Terry offered to take them for me. I agreed to deliver them to him at the club meeting just before the show, which happened to be an auction night. Guarding them against other club members who thought they were another lot in the auction kept me busy until the sale started, and even then I had to keep an eye on Dave to make sure that he didn't sell them.

In due course, Terry took them to the show and entered them in class Xe (Breeders, Labyrinths). They came nowhere in the class overall, but there was a trophy for the best team of Fighters in the class. As they were the only Fighters there, when Terry returned my fish, he also brought with him a very nice trophy.

Although there wasn't a class for Fighters separate from Labyrinths he also brought a First Place card for Class Xez.

These were the same fish that at the next club meeting, took 1st place in the Breeder Egglayers Table Show.

I can't help wondering, if I tell Terry that I've got to work on the 5th of May next year, do you think he will bench my fish for me at our Open Show?

THANKS AGAIN TERRY.

STOP PHESS * STOP PRESS * STOP PRESS * STOP PRESS * STOP PRESS *

T-SHIRTS AVAILABLE NOW NAVY WITH WHITE S.L.A.D.A.S. BADGE MOTIF
CHILDRENS SIZES 24 to 32 inch chest 'ADULTS SIZES SMALL, MEDIUM, LARGE AND
EX-LARGE
BARGAIN £2.50

STOP PRESS

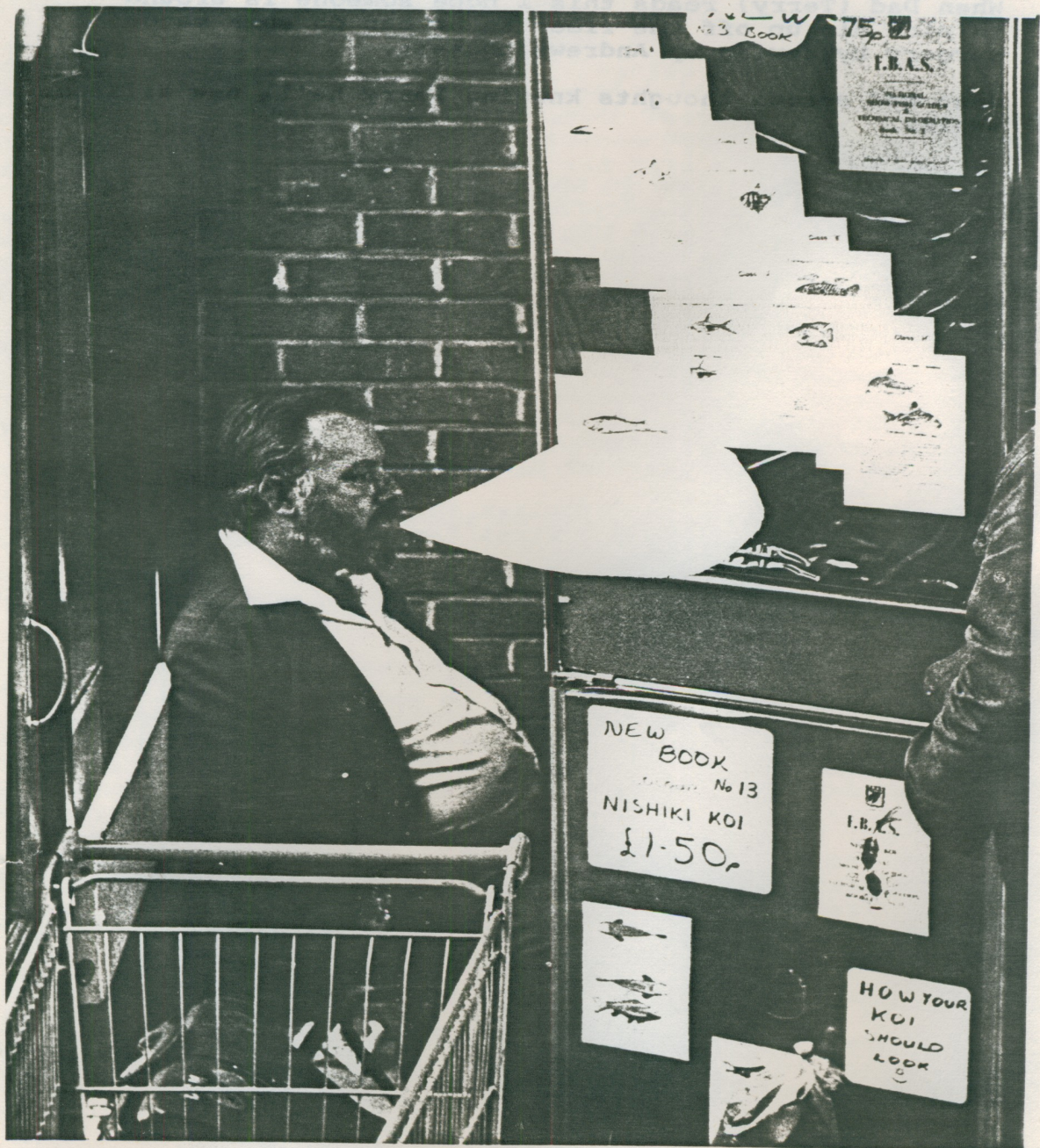
I arrived at the East London Breeders Show and found Paul (Walthamstow) Mills in a state of shock. Unable to attend the Bexleyheath Show the previous week I knew nothing of the circumstances which caused such a stir. When Paul told me I thought he was spinning a yarn. **The shock news:** Andrew Waller had actually paid out the grand sum of £5.08 for a round of drinks.

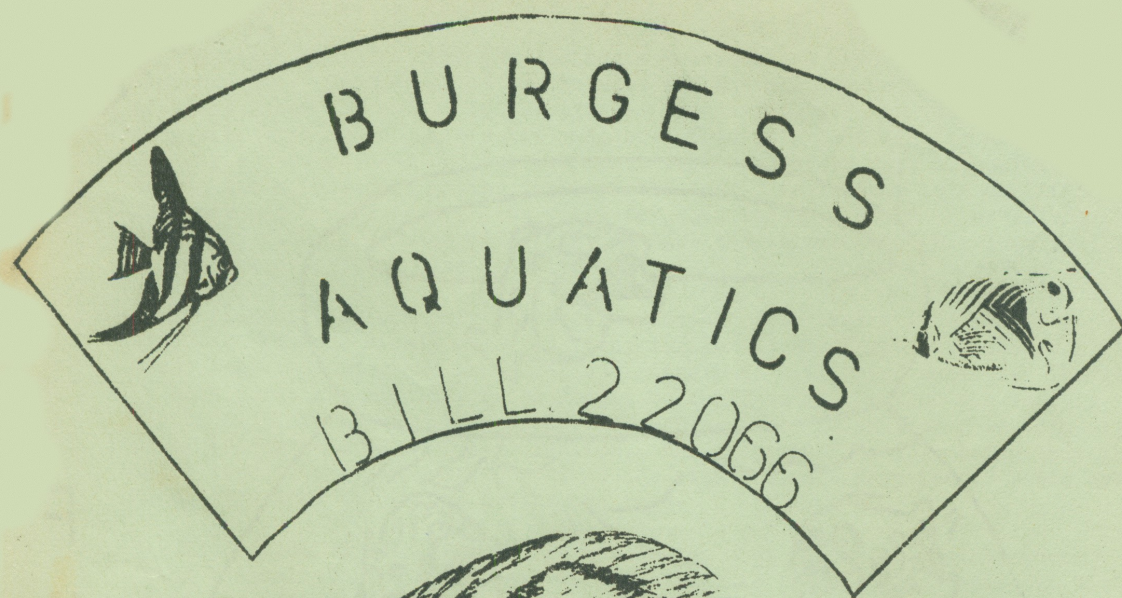
Just my luck - I wasn't there!!

When Dad (Terry) reads this I hope someone is around to pick him up off the floor so he can do some major surgery by sewing up Andrews pockets.
Just had second thoughts knowing Terry he'll use silicone sealer.

CAPTION TIME

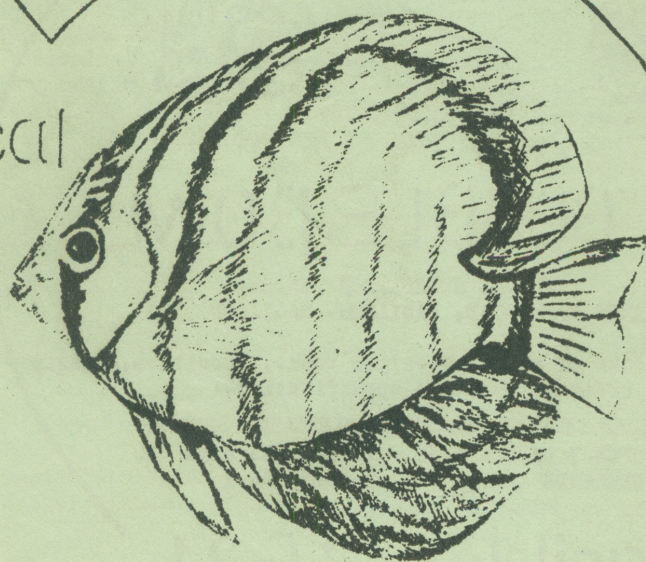
BELOW IS A PICTURE OF
FRANK CHAPMAN. FILL IN THE
BUBBLE WITH WORDS YOU THINK
FRANK SHOULD BE SAYING





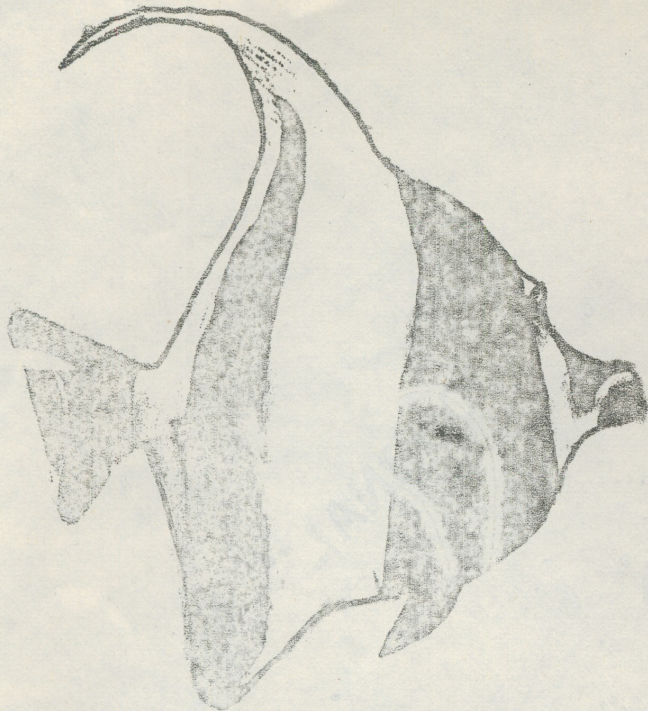
Tropical

Marine



Coldwater

727 Rayleigh Rd, Hutton.



MARINE
AND
TROPICAL
FISH

AQUARIUMS + MORE

SPECIALISTS IN MARINE - TROPICAL
AND COLDWATER

FISH AQUARIUMS MADE TO YOUR OWN
SPECIFICATION

STUDIO ONE
AQUATICS

OUR EXPERIENCE IS VAST, OUR ADVICE FREE

23 RECTORY GROVE,
LITCH-ON-SEA

SOUTHERN 714632

